

School Board Journal

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THE ATLAS OF THE SCHOOL SYSTEM.



Financing Small High Schools

W. E. Andrews, Pana Township High School, Pana, Ill.

The programming of high schools upon a competent economic basis is in its very beginnings. As yet financial determinations in high school management are arrived at with the freedom characteristic of those who have the privilege of spending others' money without the responsibility of being sharply held to account for the disbursements.

In determining the annual levy, in arranging the details of the budget, apportioning teaching and incidental expense, the methods used in high schools are such as would quickly render insolvent any business firm. Hence the ever recurring financial crises; the popular clamor for retrenchment.

What is needed is the service of an educational actuary—an administrative expert who is a statistician, who can competently gather the requisite data and calculate the financial prerequisites of sound economic direction of high schools; such an official is the greatest need at the present time.

If life insurance directors used the temporizing policy so characteristic of the financing of high schools, general collapse of the companies would quickly follow. The insurance actuary, using the mortality tables, and the classified data carefully gleaned and scrutinized, rendered certain and dependable thru repeated trial, forecasts the basic determinations and standards upon which the business is programmed. What in the procedures of the high-school directorship corresponds to this high attainment in guaranteeing a program of definite financial efficiency?

Not only is there little concern manifested for the general financial determinations of other boards of education thruout the state, but there also is little inclination to compile local statistics which, accumulating from year to year, are requisite for economic efficiency in directing the financial affairs of any local high school.

Some Questions for Directors.

How much is it costing your district to secure one dollar's worth of teaching? What should it cost?

According to state-wide experience in high schools of your type, how much incidental expense is incurred for each dollar spent for teaching?

In determining the cost of teaching, how do you determine the number of teachers requisite economically to complete your high-school staff? Why not employ more; why not employ fewer teachers?

Are you using economic efficiency-standards in determining the aggregate number of pupils per teacher, or are you leaving this thru neglect to chance? What should this number be?

In high schools of your type what is the average number of pupils per teacher based upon state-wide statistics?

In apportioning the daily work of teachers are you as careful to see that the number of pupils enrolled in any class does not fall below a determined minimum, designated as the limit of extravagant waste, as you are to see that the maximum enrolled in any class is 30, or 25?

In economically standardizing your high school do you insist that business efficiency shall govern the financial programming of the school?

As a responsible efficiency expert in financial determinations what would you do in this case: You have found that the average incidental expense during many years is 34 cents for each dollar spent in teaching in a large number of high schools of your type, but that the average in your school for the same time is 56 cents of incidental cost for each dollar paid teachers?

What is the annual cost of teaching each pupil in your high school during the last year? During each of the last ten years? What should this cost be, if the school is programmed financially to accord with the wisest efficiency standards as worked out by competent actuary practice?

What is the annual amount of incidental expense per pupil in your high school the last year? What should this amount be, if your school were directed in accordance with an efficient financial program determined by a competent educational actuary?

What is the annual cost per pupil for teaching each subject embraced in your school's program? What standards have you employed to determine the efficiency of your directorship in these important details?

What is the annual cost per pupil in each subject taught for incidental expense? What standards do you use to determine the proportion of incidental expense due to be incurred for each subject taught?

Some Actuary Considerations.

In a high-school attended by three hundred pupils there will be 300 x 4 class-enrollments, if as is the custom, each pupil enrolls in four studies. How shall these 1,200 class-enrollments be provided for in the daily program?

Shall economic considerations such as are absolutely required in the management of an efficient business be regarded? Shall actuary practice compute from the enrollment statistics of past experience a forecast of these enrollments and set economic maximum and minimum enrollment standards requisite to be observed in the interests of financial efficiency? Or shall there be no actuary design and specifications, letting things shape themselves according to chance?

If the school program of studies emphasizes economic efficiency; if an administrative actuary determines the standards of enrollments by calculations based upon statistics of past experience; limiting the enrollment in any class to a

maximum of thirty pupils, and assigning to each teacher five classes daily, and seeing to it that few classes enroll less than twenty pupils—keeping the average class-enrollment at 25 pupils per class—each teacher will teach an aggregate of 25 x 5, or 125 enrolled pupils daily. To teach the 300 x 4, or 1200 class enrollments will require 1200 divided by 125; approximately ten teachers will be required in this school. The total cost of teaching for the year, if the average salary is \$900, will be \$9,000.

If by disregard of actuary practice in programming the enrollments the average number of pupils enrolled in the classes drops from 25 to twenty, on account of the fact that several classes enroll a small number of pupils, each teacher will teach 20 x 5, or 100 pupils daily. To teach the 1200 will require twelve teachers in this school. The number of teachers rises from ten to twelve, and the cost for teaching will rise from \$9,000 to \$10,800. Thus by reason of actuary neglect an increase of \$1,800 expense for teaching has crept in unawares.

If, as is very often the case, each teacher, thru having some very small classes, teaches an average of but fifteen pupils per class, the enrollments per teacher will fall to 75 pupils taught daily. This will necessitate 1200 divided by 75, or sixteen teachers required for the work with such a program. The cost of teaching will then be 16 x \$900 or \$14,400. Thus the annual cost for teaching will rise from \$9,000 to \$14,400, an increase of \$5,400.

The writer is well aware that at present, when actuary efficiency in educational management is in its incipency, standards based upon the oversight of extravagance in administration confront us with striking claims of merit. It is the custom of schools to boast of having a large number of teachers in comparison with the number of pupils enrolled; to count it a mark of a superior school, if the number of classes per teacher is small; to cite the number of "vacant periods" per teacher as just grounds of efficiency; to count a six-period daily program as a higher standard than the eight-period daily session. But, cannot it be shown that all these may have their real reason for existence in the prevalent spirit of educational extravagance, the irresponsible attitude of that type of agent who is permitted to feel free to disburse the other fellow's money without being held rigidly to account for his trusteeship?

With the increasing cost of high school education; the growing power of college associations in setting high standards of scholastic merit which utterly disregards financial reckonings; the close specializing tendency among high school teachers who are being led to believe more and more that the most promising field of personal advance lies in the direction of closer

(Concluded on Page 83)

Functions and Methods of Boards of Education

Beatrice Winsor, Newark, N. J.

If I had been asked to talk to educators, I should have been most reluctant to do so, because what I am about to say is so obvious and so much a part of the creed of the educator that only the fact that I am talking to fellow laymen, members of boards of education, gives me courage to attempt to define our functions.

As a librarian I have for years been interested in our schools, and when I was appointed, the first woman on the Newark Board of Education as well as the first woman appointee to any municipal office, I took keen pleasure in the thought that I was to help shape the policies of our system.

From being a desultory reader of matters educational I became an omnivorous one and devoured educational periodicals, city school reports, surveys and books. As I read I became more and more convinced that the opinions with which I began my studies were correct, and that a school system ought to be managed like a large business enterprise.

As I listened to the matters brought to our attention as members of committees on buildings, grounds and supplies, and instruction and educational supplies, I found that the attitude of the board members toward the superintendent and his associates—and I say this not in a spirit of carping criticism, but simply to show you the effect of that attitude upon one accustomed to managing a business—was that of employers toward employes and not of directors toward experts.

I decided that this fault could in a measure be attributed to our rules, which perhaps served their purpose well, when nine years ago the large elective board of 30 members was superseded by our appointive board of nine, but had long outlived their usefulness.

I began then to study still more seriously the functions and methods of boards of education. As a result of that study I prepared a set of rules, comprising 1,653 words, which simply put the members of the board of education in the position of directors of a corporation with legislative functions and with the superintendent their executive officer. The reason for not shortening the rules still more is that there are certain unfortunate provisions in the state law which prohibit it.

In the rules under which the board of education is still conducting its business are 5,445 words. They put the members of the board in the position where they administer as well as legislate. This is illustrated by these facts:

(1) During sixteen months there have been held 38 meetings of the whole board and 127 meetings of the two committees of seven members each, and 25 meetings of a committee of six members, a total of 199. (I regret to say that as a member of the board and a member of two committees I felt it my duty to attend 151 of these meetings.)

(2) Nearly all the business brought before the committees has to do with details which should have been settled by the board's experts under the direction of the superintendent.

The conclusions I reached of course had very little value merely as conclusions of my own, because after all I am a layman only. But I submitted the important points in them to leading educational experts of the United States today, men like Paul H. Hanus, Nicholas Murray Butler, G. D. Strayer, Leonard P. Ayres, John Dewey, Frank W. Ballou, Chas. H. Judd,

George H. Melcher, P. P. Claxton, and I have their letters of hearty approval.

Then I asked a few leading business concerns, like the General Electric Company, the Whitehead & Hoag Co., the American Oil & Supply Company, the Splitdorf Electric Company, the Lister Chemical Works and R. C. Jenkinson & Co., if they would approve of a general manager plan of administering a \$3,000,000 business such as ours is, and I have also their unqualified approval of my plan, the essence of which is making one man responsible to the board of directors, the executive head of our whole system.

Let me say again that my own conclusions ought to carry little weight; and that without the backing of these experts I would not have presumed to present them to you.

I regret to report that I have not yet persuaded my colleagues that the plan proposed is one they must eventually adopt to put Newark in line with other cities which are following the modern plan of plain business management.

My definitions of the proper functions of a board of education are stated in 148 words, which follow. In my opinion they contain all the elements necessary to a working formula for the conduct of any school system by any board of education if the system is managed by honest experts. Of course, if superintendents and associates are not both honest and expert they must be discharged and others engaged before the system in question can even be called a system.

The proper functions of a board of education as I understand them:

Members of a board of education are directors of a large corporation and should apply the principles of good corporation management to educational affairs. Their executive officers should have authority and be held accountable for results.

A board should supply funds, supervise expenditures and determine the general policy and the extension of the system.

Its duty is to see that the schools are properly managed, and not to manage them itself.

It is not appointed to build buildings; but to see that they are built.

It is not appointed to supervise teachers; but to see that they are supervised.

In short, it is appointed, not to do the work itself, but to get it done.

As running a school system is an expert business, directed to one end, the education of children, it should be managed in all its aspects by an expert manager and that manager should be an educator.

Needed Changes in the Present Method of Conducting the Business of a Board of Education and Reasons Therefor.

1. Eliminate standing committees. A city looks to the board of nine members to manage its schools. With standing committees the board breaks itself up into several smaller boards, loses some of that unity of understanding on the part of the whole body which is so essential, scatters its energies and wastes its time.

2. Systematize its business and give to its executive staff full responsibility for executive detail, and devote itself only to oversight and direction of all that is done.

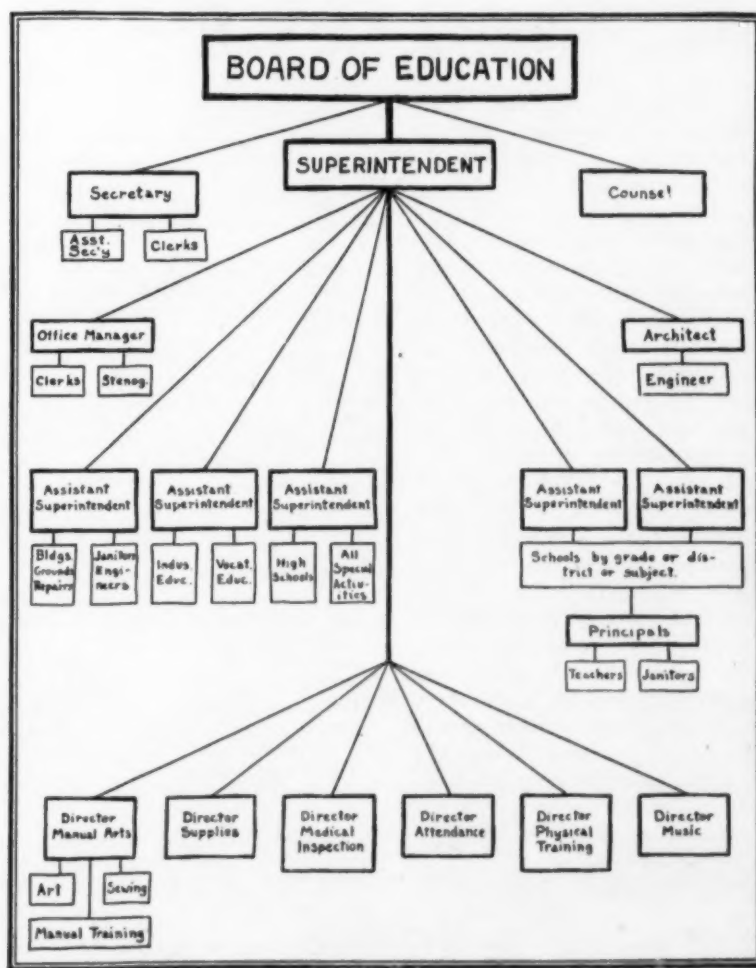
3. Make the superintendent the executive officer, give him full powers and responsibilities, and hold him strictly accountable for the successful conduct of all departments of the system.

4. Appoint the superintendent for a three years' term.

5. With the superintendent's aid define the functions of every member of the educational service.

The board should say to the superintendent:

(Continued on Page 83)



Outline of the Relationship of a City School System outlined by Miss Winsor.

Editor's Note—The present discussion of the functions and methods of school boards was read before the meeting of the Department of School Administration of the N. E. A., Thursday, July 6, 1916.

THE ANNUAL SCHOOL BUDGET

S. F. Conley, Columbia, Mo.

During the first four years of my service on the school board of Columbia, we handled financial matters according to precedent, in a rather loose way, when we discovered one day in July that we had overdrawn on the sinking fund to the extent of \$10,000. You can readily understand that this was a very serious proposition for the board and one which threatened serious difficulties. Our trouble was brought about, to a large extent, thru the fact that our treasurer deposited all the school moneys in one account, and thru the further fact that, when we appropriated money for various purposes, we did not know just what we had in each fund. This difficulty began to make us think. The only thing we could do was to inaugurate a system of rigid economy until we had replaced the money in the sinking fund.

We pursued this policy of economy in the same haphazard way as we had succeeded in getting into trouble. We considered nothing but saving money and curtailed our expenses in a number of ways, some wisely and some at the expense of the efficiency of our schools, until we learned that our high school had been dropped by the state school department into the second class of approved schools. As you can readily understand, it was very unsatisfactory to have a second-class high school in the educational center of the state and the seat of Missouri's state university. Our pride was touched and we decided that it was time to have schools the equal of any in the state and to manage so as to live within our income.

It was then suggested that we plan our work that we might know just what we were spending in each branch of the service and that we might not exceed what we thought was justified for any particular item. We decided to make out a budget and to try to live within our estimate. This we did with the able assistance of our superintendent. How well we succeeded I shall try to show by an array of figures which, at best, is not very interesting.

At the close of the fiscal school year, June 30, 1913, the expenses for teachers' salaries amounted to \$28,096.18; for incidental expenses, \$14,245.58, making a total of \$43,341.76. At this time we decided to adopt the budget system. At our July meeting in 1913 our superintendent presented his budget and suggested that it was possible to add seven new departments at the opening of school in September. The board thought this was utterly impossible because all of the teachers were poorly equipped with maps, desks and bookcases; the buildings were in a bad state of repair and were generally unsanitary. In fact, we had a protest from the citizens living near a grade school, the Benton school, against the unsanitary condition of that building. Also, we had been giving very little to our library fund. Knowing that all of the above items would have to be provided for, you can readily understand that we were very skeptical as to our ability to provide for seven new departments and the added expense. On going over the treasurer's report carefully, we felt that we would be willing to make the attempt and so coincided with the superintendent's views. The departments and their accompanying expenses, as suggested by him, were as follows:

High School.
Teacher-training Department—
Teacher's salary \$750 (state to pay \$600).
Library \$75

OUTLINE OF BUDGET.

May 29, 1915.

To the Honorable Board of Education,
Columbia, Missouri.

I beg leave to submit to you for your consideration the following Annual School Budget for the school year of 1915-1916.

Building and Repairs	\$1,600.00
Grant School Ceilings.....	\$ 200.00
Lee School—painting.....	100.00
Lee School—two drinking fountains.....	75.00
Jefferson School—two drink- ing fountains.....	75.00
Office furnishings.....	50.00
General Repairs.....	1,000.00
Extras.....	100.00
Furniture and Equipment	1,000.00
20 Cases for books and draw- ing materials.....	250.00
5 Desks and 5 chairs for teachers.....	125.00
23 Maps—Political and Relief	150.00
Manual Training Equipment	150.00
Domestic Science Equipment.	150.00
Miscellaneous.....	175.00
Manual Training Supplies	600.00
Janitors' Supplies	500.00
Soap and Bon Ami.....	25.00
Disinfectants.....	75.00
Furniture Polish.....	12.00
Chalk.....	40.00
Erasers.....	15.00
Paste.....	10.00
Toilet Paper.....	40.00
Oil for Floors.....	50.00
Floor Brushes.....	83.00
Miscellaneous.....	150.00
Domestic Science Supplies	\$400.00
High Schools.....	300.00
Grades.....	50.00
Douglass School Grades.....	50.00
Drawing Materials	350.00
Insurance	1,525.00
Athletics	300.00
Piano Rent and Music	300.00
Books	500.00
High Schools.....	200.00
Grade Schools.....	250.00
Indigent Pupils.....	50.00
Telephone Service	150.00
Printing, Stationary and Supplies	500.00
Water, Light and Gas	550.00
High School.....	175.00
Jefferson.....	70.00
Lee.....	70.00
Grant.....	60.00
Benton.....	75.00
Douglass.....	100.00
Fuel	2,076.00
High School, 7,500 bu. @ 12c	900.00
Jefferson School, 2,500 bu. @ 12c.....	300.00
Lee School, 2,000 bu. @ 12c..	240.00
Grant School, 1,500 bu. @ 12c	180.00
Benton School, 2,000 bu. @ 12c.....	240.00
Douglass School, 1,800 bu. @ 12c.....	216.00
Helpers	1,000.00
Truant Officer.....	150.00
Stenographer.....	325.00
Sec'y, Board of Education...	150.00
Enumeration.....	125.00
Treasurer.....	150.00
Janitor at Court House.....	10.00
Extras.....	90.00
Janitors' Salaries	4,000.00
High School.....	1,540.00
Lee School.....	405.00
Grant School.....	405.00
Benton School.....	450.00
Jefferson School.....	495.00
Douglass School.....	405.00
Extra.....	300.00
Miscellaneous	800.00
Total Incidentals.....	16,151.00
Teachers' Salaries.....	36,000.00
Grand Total	\$52,151.00

Respectfully,

J. E. McPHERSON,
Superintendent.

Domestic science department—

Teacher's salary.....	675
Equipment.....	1,000

Mechanical drawing—	
Additional salary.....	360
Furniture and equipment.....	325
Commercial department—	
Teacher's salary.....	675
Equipment.....	150
Science assistant—	
Salary.....	540
Preparatory high school department—	
Taught by high school teachers.	
Douglass School (for negroes).	
Manual training department—	
Teacher's salary.....	450
(Employed for entire time.)	
Equipment.....	175
New room.....	560
Domestic science department—	
Teacher's salary.....	450
Equipment.....	250

The total enrollment for the year 1913-14 was 2,074, an increase of 121 over that of the previous year. Seventy-nine children in this increase were in the high school. The added departments with equipment for each, the increased enrollment and the necessarily increased expenses, necessitated an expenditure of \$16,391.74, or \$2,146.06 more than that of the previous year. Of this amount, however, \$1,861.10 were spent for additional equipment. This expenditure, in its last analysis, shows that the increased enrollment and the additional departments increased the incidental expenditures only \$285.66 over that of the previous year.

The number of teachers employed in the schools in 1912-13 was 49; in 1913-14, 57, or an increase of eight. The teachers' salaries in 1912-13 amounted to \$28,096.18, in 1913-14 to \$33,440.39, or an increase of \$5,344.21.

We tried the budget system for a year with the result that at the close we had a balance to our credit in the treasury. We, therefore, decided to build an addition to one of the ward buildings to accommodate the increased enrollment. The contemplated addition was to consist of four rooms, two for recitation and one each for domestic science and manual training, and was to be erected at a cost of \$3,500. The amount was to be taken out of the incidental fund instead of resorting to a bond issue. At the close of the fiscal year (1915) the incidental expense, including the addition, amounted to \$18,482.35. Deducting the cost of the addition from this amount, the incidental expense amounted to \$14,982.35, which shows a saving of \$1,409.39 over that of the previous year. This finally brings me to the point which I am trying to emphasize, that is, the advantage of the annual school budget system. This system is an essential guide to both the board of education and the superintendent in the expenditure of moneys and in the management of school affairs.

You are, no doubt, asking yourselves the question: How is it possible to reduce the incidental expenditures and, at the same time, raise the standard of the schools when the enrollment increases and new departments are added? In answer to this question, I want to say that the annual school budget shows the places of leakage. These, when stopped, materially reduce the expense.

Some of the leakages which we have stopped I shall now call to your attention.

First, in September, 1913, eighteen new typewriters were obtained free of charge just because the initiative was taken by school officials. These typewriters would have cost approximately \$1,000.

Second, in the domestic science department, the Singer sewing machines (Wheeler-Wilson) which sell for \$50-\$55, were purchased at a cost of \$28 each, because those in authority insisted upon a reduction in price.

Editor's Note—This paper formed the basis of an address before the Department of School Boards of the Missouri State Teachers' Association at Columbia, Mo., November, 1915.

Third, on school supplies (chalk, erasers, drawing materials, disinfectants), purchased in large quantities, greater discounts were given and extra freight and drayage saved. For example, in 1914, formaldehyde for fumigation was purchased at drug stores at \$1 per quart; in 1915, formaldehyde was purchased in ten gallon lots at \$1.40 per gallon, thus saving \$2.60 per gallon.

Fourth, either the superintendent or the principal issues an order for everything purchased. The bills are then checked by the duplicate order slip. This method is a saving as quite frequently things which are ordered are not delivered.

Fifth, accounts are not paid twice thru mistake. Frequently accounts are paid and in two or three months the company demands a second payment. This may not be intentional on the part of the company, but it is rather hard on the school fund where no record of payment is kept. In the office of the superintendent the bills are checked, copied and filed in permanent record. The number and amount of each warrant issued in payment of accounts are on record in the superintendent's office.

Sixth. In our disbursements for 1914-15, there was an item of \$688.25 for insurance. This amount is approximately \$500 more than was allowed in the budget. This matter gave us serious trouble since our insurance had been written at different times, with the result that in some years we had a heavy insurance charge and in others practically none. This arrangement was very disconcerting to the superintendent, causing him much trouble in curtailing expenses sufficiently to meet the unexpected charges. We appointed a committee, of which the superintendent was a member, and instructed it to systematize our insurance. After careful investigation and a great deal of correspondence with the State Rating Bureau, we learned that we could materially reduce our rates by making some improvements in the direction of safety. These we made at an expense of \$120, and thereby lowered our insurance premiums \$300. Upon further investigation we found that our five grade buildings were insured for 80 per cent of their value, or more. By grouping them under blanket form another reduction of 25 per cent was secured. We then had all our policies cancelled pro rata and rewritten so that one-fifth of the insurance falls due each year. Thus, at all times, the board of education knows that a definite sum must be allowed each year for insurance premiums; also, in case of neglect to renew at least 80 per cent of the insurance is in force. By this method of reduction the total credit by cancellation on insurance policies amounted to \$888.96. Altho the sum of \$1,525 was allowed for insurance in the 1915-1916 budget, the premiums and necessary expenses of making the adjustment amounted to only \$790. In five years the actual saving on total insurance effected by these changes will amount to \$590.

Seventh, a Mothers' Club in one of our districts raised \$258, to equip domestic science and manual training rooms in a school building. The amount, however, was not sufficient if domestic science tables, stools and manual training benches were to be purchased at prices quoted. Since "necessity is the mother of invention," the manual training department of the high school was asked to make the domestic science tables for the cooking room. These tables when completed, with Alberene stone tops and gas burners, cost \$189.10. With the remainder of the money (and some help from the board) ten manual training benches, and tools for each, were purchased by the club.

Eighth, we now have every one of our buildings in first-class sanitary condition. Each room

FINANCIAL STATEMENT COLUMBIA SCHOOL DISTRICT.

January 27, 1916.

Receipts.	
Balance cash on hands, July 1, 1915.....	\$20,347.74
From County Collector	47,918.12
State school money.....	9,548.12
Insurance rebates	39.87
H. L. Cox.....	90.13
Sale of blackboard	9.98
State Fair Premiums	42.00
Interest on deposits.....	136.37
Tuition to date.....	1,964.50
Disbursements.	
Teachers' salaries to January 1, 1916	\$16,179.96
Incidental Expenditures January 1, 1916.....	10,094.31
Redemption of bonds	12,500.00
Redemption interest coupons	2,513.91
Balance cash on hand, Jan. 27, 1916	38,809.45
	\$80,097.63 \$80,097.63

has been freshly varnished or painted, where needed; all defects of plastering have been corrected, or metal ceiling used, where the plastering was in a very bad condition, and a good deal of roofing and other outside repairs have been made. Each teacher has been supplied with a neat bookcase, suitable maps and other equipment. We have increased our library expenditure to \$500 yearly, and many other improvements have been made. It is sufficient to say that we have tried to equip our schools with the necessities at as reasonable cost as possible, and the universal testimony of the teachers has been that it has made for improvement in discipline and in the general tone of the work.

We have always proceeded on the theory that the school board is the legislative body; the superintendent and teachers, the executive body of the school system. I do not know who the judicial body is as we have had so little occasion to invoke the judiciary that it is difficult to say.

We run our schools just as any business house would try to handle its affairs. As I have tried to show you in our budget, we systematize our expenditures and live within our income as in any well managed business. This spirit of system extends into all other lines and inspires good work.

Our records tell us the comparative cost of the different subjects taught in the high school. For instance, the comparative cost of instruction in the various departments of the high school for 1914-15 were as follows:

ESTIMATED RECEIPTS (delinquent) AND EXPENDITURES FROM JANUARY 27, 1916—JUNE 30, 1916.

Receipts.

To January 27, 1916.....	\$80,097.63
From County Collector.....	5,000.00
State for Teacher Training.....	600.00
Interest on deposits.....	400.00
Tuition	300.00

Disbursements.

July 1, 1915—Jan. 27, 1916..	\$41,288.18
Teachers' salaries	20,000.00
Incidental expenditures	5,500.00
Redemption interest coupons	2,500.00
Balance on hand June 30, 1916	17,109.45

\$86,397.63 \$86,397.63

ESTIMATED DISTRIBUTION OF FUNDS JUNE 30, 1916.
Teacher and incidental fund.....\$ 3,609.45
Interest and sinking fund.....13,500.00

Respectfully submitted,
J. E. MCPHERSON,
Superintendent.

	No. students	Total cost instruction per month	Cost instruction per pupil, per month
English	382	\$184.16	\$0.482
History	364	170.	.476
Mathematics	340	191.47	.506
Latin	237	131.67	.555
German	130	70.	.538
Manual Training.....	33	95.	2.87
Domestic Science.....	30	84.	2.83
Commercial			
Branches.....	53	75.	1.41

In two of the departments, manual training and domestic science, there is an additional cost for materials as follows:

	Total cost materials	Cost materials per month, per pupil
Manual Training.....	\$250.00	\$0.841
Domestic Science	196.63	.728

During the past three years, 1913, 1914, 1915, the average cost per pupil in the Columbia schools was as follows: High School, \$34.19, \$39.19, \$41.26 respectively; in the elementary schools, \$18.16, \$18.56, \$18.68 respectively.

The superintendent makes all nominations for teachers after consultation with the principals of the various schools. I do not recall an instance where his nomination has not been ratified by the board. He also presents the annual budget which is passed on by the board at its July meeting, for the ensuing year. Under this system a great deal of annoyance is spared the board, and I think makes for much more effective school organization than under our old system. All applicants who apply directly to

(Concluded on Page 83)

	Disbursements 4th Month Ending Jan. 11, 1916.	Summary Disbursements from July 1, 1916.	Budget for 1915-1916.
Telephone		\$ 88.05	\$ 150.00
Building and repairs.....	\$85.41	1,267.56	1,600.00
Equipment	78.34	1,349.05	1,000.00
Manual training supplies.....	34.52	244.78	600.00
Janitors' supplies	4.90	366.89	500.00
Domestic science supplies.....	41.46	241.41	400.00
Printing and supplies.....	15.25	317.09	500.00
Water, light and gas.....	50.19	239.79	550.00
Fuel	324.36	734.75	2,976.00
Books	82.92	434.66	500.00
Helpers	110.00	441.52	1,000.00
Janitors' salaries	400.00	2,114.00	4,000.00
Drawing supplies	113.46	173.98	350.00
Athletics	34.59	373.56	300.00
Insurance		972.94	1,525.00
Miscellaneous	24.39	507.14	800.00
Science department supplies.....		30.89	
School Board expenses.....	47.12	184.62	
Music	27.50	105.34	300.00
	\$1,474.41	\$10,181.02	\$16,151.00
Incidental expenditures for fourth month ending January 11, 1915.....			\$ 1,191.11
Total incidental expenditures from July 1—January 11, 1915.....			12,889.51
Total incidental expenditures from July 1—January 11, 1916.....			10,181.02

Respectfully submitted,
J. E. MCPHERSON,
Superintendent.

This is a copy of monthly statement presented to Board of Education on January 11, 1916. These monthly reports keep the Board familiar with the expenditures from month to month and show whether or not the items in the budget are being exceeded.

THE NEW YORK CONVENTION

54TH ANNUAL MEETING OF THE NATIONAL EDUCATION ASSOCIATION

William C. Bruce

New York is a city of superlatives and only adjectives in the superlative degree can describe its population, commercial importance and size. That a convention of the National Education Association held in New York should show some of the city's qualities in the shape of superlative size and variety is only natural. It is not surprising then that the 54th annual meeting of the association was the *largest* in point of teachers in attendance, the *richest* in the variety and completeness of the entertainment, and the *most important* in program, which has been held in many years.

Similarly, it is hardly a matter of surprise that the most important topic of public discussion in New York—preparedness—should afford material for the largest question of serious debate which roused the members. The question of the status of the teacher, which has been agitating New York, and recently also Chicago, came in for more than its share of the general interest. But the problems of the junior high school, vocational education, rural schools, the Gary plan, thrift, the status of the teacher—these were the substantial pedagogic topics that stood out in the vast array of meetings and speakers—uninfluenced by the city or city conditions.

For one notable meeting in its history the Association found ample hotel accommodations awaiting it. In fact, some of the chronic grumblers were a little surprised to learn that the meeting made no appreciable impression on the available first-class hotel space in the immediate neighborhood of the headquarters. The Madison Square Garden afforded for the largest general session double the amount of seating space required, and many splendid meeting halls within a radius of a mile housed all of the Departments—comfortably and handsomely. The "high spots" of the New York school system were open to the visitors for inspection and thousands of teachers availed themselves of the opportunity for "the broadening influence of travel" by frankly going sight-seeing.

New York City provided nobly for the meeting by securing 13,000 advance registrations from among its teaching corps. Superintendents, principals and teachers joined with nationally famous business and public men, social workers and society women to manage the local affairs of the convention and to contribute both money and time toward its success.

It may be doubted whether any number of educators from all parts of the country have ever so thoroly understood the great size of the New York school system as did the 17,000 men and women who came in contact with that system, and its overpowering problems, during the convention week. Certainly there were very few who did not express surprise that New York has a school enrollment of over 700,000, a teaching corps of 25,000 and an annual outlay of \$42,000,000 for school purposes.

The General Program.

A brief report like the present can touch only upon a few points of general interest in reporting the general meetings of the association. President Johnson provided the greatest number of topics and speakers which have appeared at any convention of the association. While no general subject or idea ran thru the papers, all of the speakers took occasion to refer to the need of democracy and democratic ideals in education. The advocates of the ultra-practical new education appeared to be in the majority at most of the sessions even tho a considerable number of speakers, like Mr. C. G.

Pearse in his paper on "The Influence of the Elementary Schools," called rather sharp attention to the need of conserving and strengthening the old, tried ideals of culture and fundamental education.

The acoustics in the Madison Square Garden are extremely poor, and the precautions taken to improve them failed to make most of the speakers heard beyond the front twenty-five rows.

Addresses of welcome at the N. E. A. conventions are generally brief and frequently perfunctory. In New York City, each of the seven men chosen to welcome the association took occasion to lengthen his three-minute period into an address of nearly thirty minutes so that the gathering was both overheated and tired when President Johnson began his formal paper on "The Rural School and the Rural Woman."

"The rural education problem is wrapped up in the rural home and the rural community problem," said Dr. Johnson. "The needs of the rural home have been overlooked and the farm woman has been forgotten in all of the progressive movements for rural betterment until comparatively recent years. The farm home is an essential part of the farm business. If the farm home and the farm woman are not what they should be, the farm business cannot be what it should be. If the farm woman's health and strength are conserved and she is given the requisite time and training she can make life in the rural home interesting, wholesome and satisfying as indeed she has done already in so many instances. The country has many natural advantages over the city for making home life what it should be, and it only remains that these advantages be made the most of."

Dr. Johnson earnestly urged the creation of a national commission to study the problems of the farm home and the farm woman so that country life and the rural family may become a strong factor in our national life. He said:

"In order for country life to be financially and socially satisfying the people must have education and own their homes, and must co-operate with each other in rural community activities and must have rural community or-

ganization for the promotion and support of an educational, religious, social, business, and intellectual community life. Some are of the opinion that the whole rural problem is 'practically the problem of the country school.' The country school, which is to improve agricultural conditions and keep good citizens on the farm and make good citizens on the farm, must relate its work to the community life of the people served by it, must educate the children for country life instead of away from it, and must relate universal elements of education to the country community needs, must train the children for their future work in the home, on the farm and in the social life around them, must be a 'community center of education, instructing both children and adults in terms of country life and pointing the way to community prosperity and welfare,' must concern itself with the business and social life of the people, promoting helpful and profitable co-operation and neighborliness. It cannot neglect the health, the recreation, nor the social ideals of the people.

"Of greater importance than the question of the 'high cost of living' is that of the 'high cost of wasting,' but of greater importance than both of these is that of the 'high cost of ignorance.' One of the best remedies for the poor home is the teaching of home economics in all of its phases.

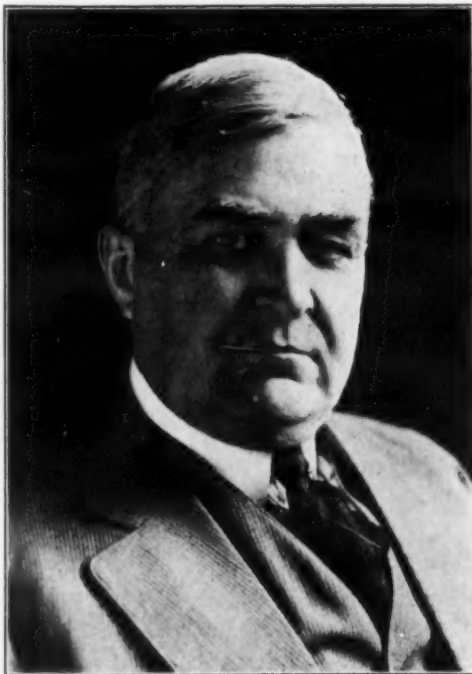
Importance of Neighborhood Teacher.

"Of all the agencies, the neighborhood teacher with agricultural and home economic training and the right spirit of civic service ought to be the most effective. I rejoice that two-thirds at least of our normal schools are contributing effectively to the solution of this farm woman and rural life problem by giving their students training in home economics.

"The home economics extension work of normal schools and colleges for rural communities is producing gratifying results. The Smith-Lever bill offers great promise for the development of home betterment work for the country. The Rural Credits Act recently passed by Congress will do much to better rural conditions and rural homes. On the whole, I think the outlook for the betterment of rural life conditions is full of hope. Our people are waking up to the vital importance of the rural problem to the welfare of the whole country, as never before in our history, and are girding themselves for a great intelligent and united effort to give help where it is most needed. I think we can thank God and take courage."

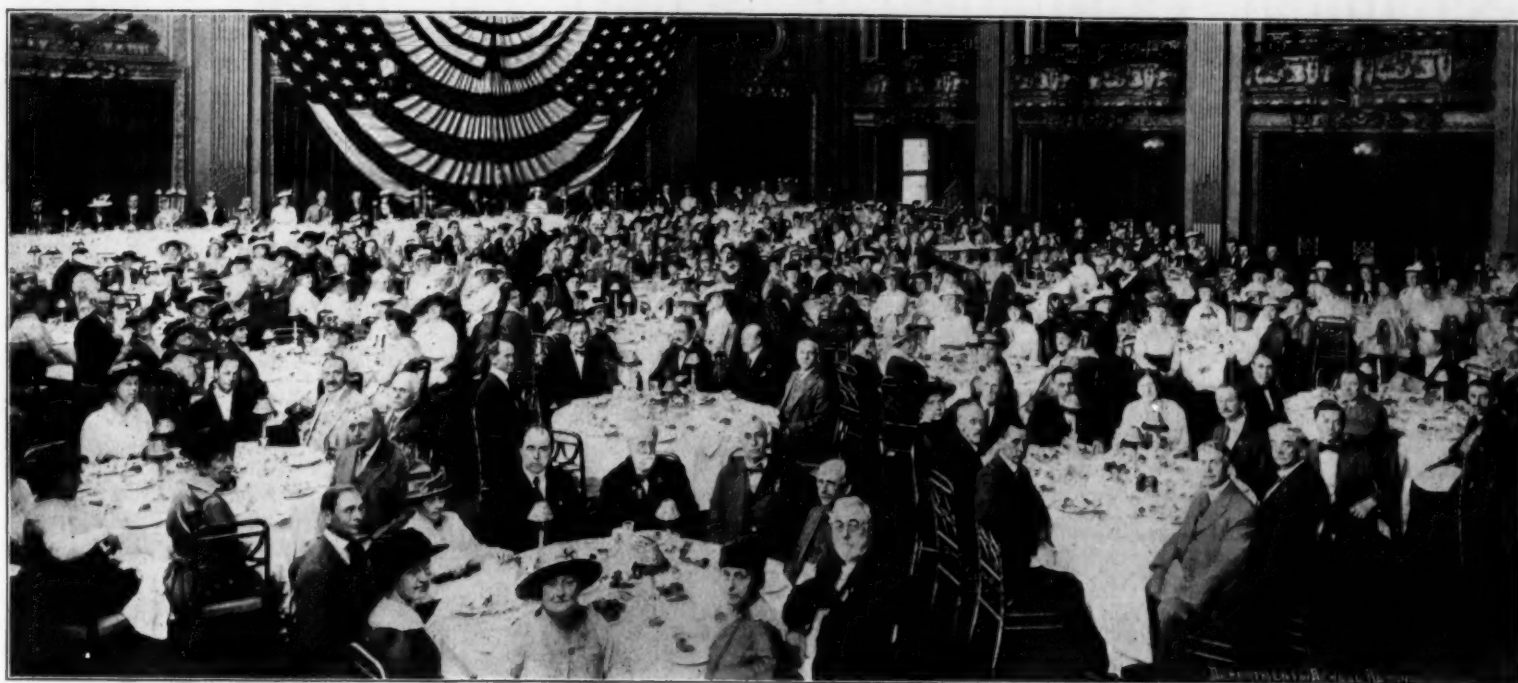
Dr. P. P. Claxton, who followed President Johnson, presented a paper on "A National Program of Education" following very much along the lines of similar addresses which he has delivered during the past year in different parts of the country. Former President Taft closed the meeting with a description of the work of the League to Enforce Peace. In his usual happy way, Mr. Taft made a strong plea for the platform of the organization in which he is vitally interested, and which, if its program is carried out, should bring all of the civilized nations of the world into harmony for the arbitration of all international questions and for the broadening and enforcement of international law.

The session of Monday evening opened with a plea for organized recreation on the basis of community interests. Mr. Warren P. Foster, who spoke on this topic, presented the results of a campaign which he has been making in villages and small cities in several sections of



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DR. ROBERT J. ALEY, Orono, Maine,
President-elect of the National Education Association.



Luncheon of the Department of School Administration of the National Education Association at the Waldorf-Astoria Hotel, New York, July 5, 1916.

the country. Mrs. Cora Wilson Stewart of Kentucky, followed with a plan for extending, in a national way, the fight against illiteracy which she has waged so successfully in Kentucky.

The session on Tuesday was largely in the nature of a Fourth of July celebration and Wm. Jennings Bryan received an ovation such as no other speaker received during the entire week. Mr. Bryan begged the members of the association not to yield to the clamor for militarism which, in his opinion, is not the voice of the people, but an echo from the battlefields of Europe. "Temporary excitement of the world war should not be allowed to disturb our permanent educational system," he said. "The school is not a transient institution; it will abide with us when the battle flags are furled."

The audience stood up when Mr. Bryan entered the garden and applauded one of his earliest sentences, "We cannot compel the teaching of religion but Christian taxpayers have the right to protest against the teaching of irreligion in the guise of philosophy in our universities." In discussing the topic of school militarism, Mr. Bryan said:

"Two years ago no one suggested that we put military training into our public schools, and let us hope that two years hence this awful fever of war will have run its course and that no one will ever again suggest it after that. If political parties looking for votes couldn't be scared into putting militaristic planks into their platforms this year, why should the teachers who are not looking for votes be scared?"

"What an idea—is it possible that a country that could not be frightened two years ago by European nations filled with able bodied men should now be frightened by nations filled with cripples! We cannot afford to follow the tail end of Europe as a military nation. Shall we convert our nation into an armed camp and our public schools into breeding places for an army? Never.

"Peace and not war is the normal state of man and the teacher may well insist upon the postponement of any proposed changes in school methods until such changes can be considered with calmness and deliberation. It is unreasonable to ask the school authorities to act in hot blood or in fright. The people are not likely to favor frontier precautions unless they are convinced that we must again face frontier dangers, and they can hardly be convinced of this so long as the leading political parties decline

to indorse such a program. The 'adequate' reserves asked by one party and the 'ample' reserves asked by the other party can be adequately and amply supplied without robbing the cradle or recruiting in the graded schools.

"If it is thought wise to give more attention to the physical development of our youth the means can be found in a closer imitation of the Greeks, who, by their national games, provided contests which contributed to physical development. This association might with propriety consider the wisdom of encouraging such a system. State and national prizes would stimulate an honorable rivalry which would be immensely valuable to our boys and girls, measured by progress toward physical perfection."

The session on Wednesday afternoon included six addresses each of more than usual value and interest. Dr. J. Y. Joyner spoke on preparedness thru general education for a democracy.

President Carroll G. Pearse of the Milwaukee Normal School, argued against any change in the elementary school organization and curriculum which shall reduce the influence of the school as an instrument of democracy.

Dr. G. Stanley Hall analyzed philosophically the results of the present war in changing the European countries physically, mentally and morally, in bringing a new solidarity both in the trenches and at home and in giving a new perspective of life and of fundamental life principles. Dr. Hall pointed to the fact that the war is revising in a wonderful manner, the instincts of self-sacrifice and subordination to the general cause. He pointed out that men are going back to the religion of their youth and their parents. The ties of brotherhood, of creeds and of races are coming closer together. Literature in France, for example, shows a striking turn from skepticism toward true religion, and not a few of the most notable new books and paintings have been saturated with the spirit of religion. "So in Germany," he said, "and in other countries where culture had become more independent of religion, we have a comprehensive and spontaneous revival of a spirit that is truly Christian and that suggests Augustine's phrase 'That the soul of man can never find true rest save in God.'"

"Here, then, we realize the way of true preparedness, which is not pageants and processions, but if these rivers of blood bring any compensating good, it will be in the way of social harmony between ranks and classes, the

abolition of barriers and prejudice, closer cooperation between the rich and poor, capital and labor, learning and ignorance. Even our coming political campaign should be tempered with moderation because preparedness should make us in a new sense all members of one body. Preparedness, finally, involves keeping ourselves in the highest physical and moral condition, to strive for a higher personal purity and social righteousness, a life of justice, integrity, and controlled appetites and passions. Thus the war calls on each individual to examine himself and to be sure that there is peace, harmony, and poise within, and that neither within nor without energy is lost by useless friction. Each must find in his own heart something he loves better than self, and could either live or die for as the gods decreed. In this alone man attains his true majority and will be fit for full citizenship in the new world that ought to emerge out of this, the greatest moral catastrophe that has ever befallen Christendom."

The session closed with an address on "The Socialized Recitation" by Supt. Fred M. Hunter of Lincoln, Neb.

Vocational education was the main topic for the session on Wednesday evening. Mr. Hollis B. Frissell emphasized the need of industrial education for the negro. Commissioner Finley spoke of the need of strengthening the education facilities provided for adult aliens and Supt. John D. Shoop of Chicago, spoke of some fundamental problems in a system of vocational education. Homer H. Seerley of the Iowa State Teachers' College advocated national aid for vocational education. Secretary Redfield of the United States Department of Commerce, who closed the session, urged that the schools should include in their curriculum a well defined scheme of vocational education. "Vocational education," he said, is the opponent of things narrow and cramping. It would take a boy and make him a mechanic knowing the why and wherefore of mechanics. It would make reasoning workers and not automata. Its purpose is to make men and women flexible in their working powers and to take the rigidity out of toil. It is a human force, sympathetic and virile, leading the mind to express thru the hand, the character and spirit of the worker."

"First and foremost, then," continued Mr. Redfield, "among the things to be gained by vocational education I should put its human value, the bringing of a greater symmetry to

(Continued on Page 70)

Mechanical Tabulation of School Financial Statistics

J. S. Mullan, Secretary, School Board, Rochester, N. Y.

In the educational field, as well as in other public service, there has been some difference of opinion as to accounting procedure and the development of statistical data. In fact, the statement has been made on various occasions that educational service so differs from other public service and that all public service so differs from private service that there is no such thing as a common denominator—or in other words, that standardized accounting is a dream.

I am not in accord with that idea, for, in my opinion, the general principles of accounting are identical whether in private or public service, education included. The more or less difference of opinion which has arisen in the development of school accounting and statistical data has been due, in my judgment, to the budget controversy and not to technique per se.

Most of us have had to contend with the "segregated" budget, so-called. For those who have not, I will explain that the "segregated" budget is the adoption in a legislative appropriation act of the multitude of financial and statistical detail prepared in support of a department's proposed ensuing year's work-program.

There is no question in my mind but that the budget request of any administrative official or board should be based on a definite work-program, that the proposed work-program should be supported by full and complete explanatory detail, and that the administrative official or board should expect and be prepared to defend this work-program. But when discussion is over and appropriations are determined, I hold that the appropriation act should set forth appropriations on a lump sum basis. In fact, to go further, an administrative official or body should stand for election or appointment on a definite work-program, and expect to continue or be retired on the results of such program. It seems to me that in this we all must agree. Such philosophy is in accord with the principles of scientific management, including "production control." But that the supporting details of a work-program, rather than a general grant of power, should be incorporated in a legislative act is, in my judgment, manifestly absurd. I do not understand that the principle of "production control" in scientific management means any such thing. What, then, does it mean and what am I contending for when I speak of a definite work-program as applied to school service?

I contend this: That, while the idea behind the "segregated" budget is sound in that what it attempts is productive control—to go to the extreme by incorporating in appropriation acts administration working detail inevitably makes for an unnatural restraint and produces friction; that it hampers, impedes and clogs administrative service, and in the end defeats its own purpose, i. e., the promotion of efficiency and economy. (You will notice that in the use of the terms efficiency and economy I put efficiency first. I do this for the reason that efficiency makes for economy, whereas economy does not always make for efficiency.) I believe that detail—in some instances much more detail than is generally submitted with a "segregated" budget—should be submitted with any budget; but my main contention is, that instead of presenting such detail as of major importance for legislative and public review, (that is, details as to rates of compensation (salaries), quantities and prices of supplies, the amount of lumber and paint and the brand of the latter to be used in repairs, etc.) such data should be considered as

of minor importance, and should be relegated to the background where they belong.

Now, the question arises as to how this confusion of thought is to be dissipated and how a budget work-program should be presented. It is trite, at least in the educational field, to say that a public servant should always be ready to give a full and a complete accounting. Currently and periodically, or whenever requested by proper authority or upon the reasonable request of anyone else, educational service should be prepared to give statements of expenditures in any detail or arrangement desired. But, in the general presentation of school financial and statistical data, I believe that statements should be made in terms of school service and stress should be laid upon functional costs. It is of infinitely more importance to show how well we spend, rather than how much we spend.

In the preparation of school statistics and the presentation of educational data, it is always to be borne in mind that the purpose of such information is, on the one hand, to determine expenditures; and, on the other hand, to measure service.

Up to the present time, the analysis of school expenditures and the development of school statistics have been restricted because of cost and the time element—that is, whether the information would be worth what it would cost and whether it could be compiled in time for administrative and legislative use. With the adaptation of machinery to statistical purposes, we are entering upon a new era of statistical possibilities. With mechanical tabulation, cost and the time element are being reduced to the minimum. In fact, statistical analyses, heretofore prohibitive and practically impossible, are now being compiled, used and demanded.

With mechanical tabulation, the bookkeeping division becomes a machine shop. The machinery consists of card punching machines operated by hand (for individual cards and cards in gangs), a card-sorting machine operated by electricity, and a tabulating machine, also operated electrically. The cards used in connection with the machines are somewhat larger than regular index cards. Upon the cards are printed what are technically known as "fields," each field representing an item of information. The fields consist of vertical lines of varying distances apart, in which appear numerals, each field containing one or more perpendicular rows of numerals according to the requirements of each of the fields. The cards which have been adopted for use in the accounting division of the Rochester school system show the year and month; voucher number; vendor; school building; day, night, continuation or normal school; function; sub-function; educational subject; character of expenditure; quantity; unit of measure; commodity; class and number; price; amount; fund; and whether contract, open market order, payroll or miscellaneous expenditures.

Expressed in a numerical code, the information is punched on the cards by the operator striking keys which perforate the cards with small holes. Any data appearing on the requisition, invoice, payroll or voucher can thus be transferred to the cards, after which the cards are ready for sorting and tabulation. It can be seen that once the cards are punched and checked with the original document, the period of detail checking is over. All the data punched on the cards are elemental. The total of the cards is the sum of the elements. Once punched and checked, the cards go to the sorting machine, where by electrical contact thru the holes in the cards they are sorted into any pre-determined

group; thence they go to the tabulating machine, where in the same way they are tabulated by groups and in total, the totals when obtained being entered on a prearranged form. The sorting and tabulating may be repeated until all the fields on the cards have been covered, the final totals of the various sortings being the automatic check. Furthermore, the punching of the cards and their tabulation are accomplished in a comparatively short period of time, so that any group result, or combination of results, is expeditiously produced and at a minimum of cost.

Compare the possibilities of this procedure with distribution by hand-posting, including the factor of possible clerical error, the difficulty of attempting to carry on more than one analysis at one and the same time, i. e., functional service, amounts of compensation, quantities and prices of commodities, repairs, interest, refunds, bond payments, etc., and the confusion of thought in handling such a conglomerate—and we begin to appreciate the possibilities of mechanical tabulation and its superlative advantages.

In what I have just said, I realize its possible resemblance to my city's slogan of "You push the button and we'll do the rest." But I am also aware that the analogy can be carried still further, viz., that the wonderful results of up-to-date photography are possible only because of scientific preparation. This is true of mechanical tabulation. Mechanical tabulation to be effective requires thoro preparation in code and pre-determined classification. Without codes and classifications mechanical tabulation is static; with them it is dynamic. In the educational department of the city of Rochester, we have given extensive and intensive study to organization, classification and code; and in this study we have had the co-operation and assistance of the Rochester Bureau of Municipal Research.

Our code is as follows: In the first place we divide our organization into three main functions, (1) Legislative and executive service, (2) Proprietary service, and (3) Instructional service.

Legislative and executive service is subdivided into (a) Legislative regulation and control—the function of the Board of Education, (b) Executive direction and control—the function of the Superintendent of Schools, and (c) Staff advisory service, i. e., accounting statistical, research, legal and such other services as are advisory in their capacity to the board and to the superintendent.

Proprietary service, so named because of its relation to property, is sub-divided into (a) managerial direction and control—the function of the business manager, (b) acquisition, care and distribution of funds—the function of the treasurer, (c) provision, care and disposal of land, buildings and equipment—the function of the repair and construction division, and (d) provision, care and disposal of supplies and materials—the function of the purchasing, store-room and delivery division.

Instructional service is divided primarily into (a) general instruction, and (b) educational extension and social service.

General instruction is subdivided into (1) instructional direction and control—the function of assistant or staff superintendents, attendance enforcement, and instructional supervision; (2) elementary instruction, covering kindergarten, grammar school grades up to and including the sixth, special instruction for the foreign-born, the backward and the subnormal; (3) in-

Editor's Note—This paper was read before the National Association of School Board Accountants at Des Moines, May 16, 1916.

intermediate instruction, covering the seventh and eighth grades and the first year of high school—and subdivided into academic, commercial, household-arts and industrial-arts instruction; (4) secondary instruction, covering the second, third and fourth years of high school and subdivided into academic, commercial, household and industrial-arts instruction, the same as in intermediate instruction; and (5) higher education, which in the Rochester school system covers the normal school division. Rochester has a university but it is not a part of the school system.

Educational extension and social service is subdivided into (1) provision of school lunches, (2) provision of educational supplies to indigent, (3) physical education extension, (4) recreation center activities, (5) exhibits and celebrations, (6) school libraries, and (7) medical inspection of school children, which in Rochester is under the bureau of health.

In addition to the foregoing functional classification, we have what might be termed a sub-functional or work-performance classification, consisting of a codification of the various curriculum subjects taught, i. e., spelling, arithmetic, grammar, sewing, cabinetmaking, shorthand, algebra, chemistry, etc. These subjects are also coded as to the grades in which they

are taught. For example, cooking taught in the fifth and sixth grades is H02-56. Printing taught in the tenth grade is H34-10. Shorthand in the twelfth grade is C72-12.

In our character of expenditure classification we have followed largely the example of Philadelphia, but with revisions, adopting as our main divisions (A) administration, (O) operation, (U) upkeep, (F) fixed charges, (C) contingencies, (C) capital outlay, and (T) payments as agent. You will notice that we are using mnemonic characters.

To meet the requirements of the proprietary service department, upkeep has been further subdivided into (1) trees and shrubbery, (2) grounds, (3) buildings—exterior, (4) heating and ventilating plants, (5) plumbing, (6) communicating apparatus, (7) cleaning plants, (8) lighting, (9) other building repairs, (10) furniture, and (11) tools and equipment.

For our object of expenditure classification, we are adopting a new and revised code which has been worked out for all our city departments by the Rochester Bureau of Municipal Research, and in it the attempt has been made to eliminate purpose as much as possible. This classification has as its main divisions (A) personal service, (B) services other than personal, (C) supplies and materials, (D) equipment, (E) land,

structures and non-structural improvements, (F) rights, obligations, and payment of debt, (C) rent, privileges, interest, taxes, insurance and depreciation, (H) pensions, (J) contributions, (K) losses and contingencies, and (L) payments arising from the relation of agent.

Our funds are divided into (1) General Fund, consisting of revenues from taxation and other sources which are usable for general educational purposes; (2) Special or trust funds, consisting of funds which may be received from the state, municipality or other agencies, and which are to be used for specific purposes, including funds held in trust; and (3) capital fund, which may include funds by taxation but which consists usually of the proceeds of notes or bonds issued for property acquisitions.

With the statement that every school building is numbered, and that day, night, continuation and normal schools are distinguished by the code letters D, N, C, and T, I have given you in general our Organization and Expenditure Code.

I shall not take up the discussion of school statistics, which cover as broad a field and have problems fully as involved as expenditures. We in Rochester are now working on educational statistics, (as you have undoubtedly seen in the publication of the Rochester Age-Progress chart) and we expect in the future to cover the field

(Concluded on Page 82)

The Legal Foundation of the Buffalo School System

Frederick E. Shapleigh

The public school system of Buffalo is administered under unique legal provisions. These laws, embodied in the city's commission charter, are a natural outgrowth of earlier statutes governing the administration of public education within the municipality.

To understand the present educational laws and ordinances, we must go back to the beginning of Buffalo's school system and trace the developments which have led to the existing legal foundation of the school system.

During Buffalo's entire history as a town and later as a village, and for the first five years of its existence as a city, there were no local laws governing the schools of Buffalo. None of the organization acts of the town, village or city contained provisions under which common schools might be organized and maintained.

Prior to 1837 the public schools were controlled by the general law enacted in 1812 and by its amendments. This general law created three local agencies for the administration of schools: (a) Trustees of school districts, charged with the general business affairs of the district, (b) Town commissioners of common schools, charged mainly with the supervision and handling of state school funds, and (c) Town inspectors of common schools, charged mainly with determining the qualifications of teachers.

Thus, even before any local law or special law was enacted relating to the schools of Buffalo, the following principles were well established: (a) That the supervision and control of the State must follow the funds of the State, (b) That the State may determine who shall be employed as teachers in the public schools of the State.

Under this early scheme of state management and control of schools the trustees were representatives of the people of the school district; the town commissioners were representatives of the State; and the town inspectors "were the State's first local supervisory school officers."

In 1837 amendments to the charter of the City of Buffalo provided for the operation of a city school system. Provisions of the general education law not superseded by the act of 1837 still applied to the schools of Buffalo.

This act of 1837 created a city superintendent of common schools (the first law enacted by any state creating a city superintendent of schools). The superintendent took the place of the trustees and inspectors of schools, while the mayor and

aldermen were made ex-officio commissioners of common schools, i. e., local representatives of the State. It should be noted that "altho the officers constituting the common council were identical with the officers constituting the commissioners of common schools, yet such council and such commissioners as a body each formed a separate and a distinct corporation."

Since the functions of school commissioners and of common council, altho two distinct corporations, were performed by the same men, these functions gradually became merged in actual practice and also in the mind of the public, until as a natural sequence in 1853 the powers and duties of the commissioners of common schools were conferred directly upon the common council. In 1870 "the powers and duties in relation to the schools were directly delegated to the city itself."

Thus the schools of the City of Buffalo, evolving from a purely state system, finally became a part of the municipal government and therefore subject to the political influences commonly prevailing in municipal affairs.

During the 25 years prior to January, 1916, when the Commission Charter went into effect, the public schools of Buffalo were operated under an educational chapter noted for its divergence from contemporary legislation affecting the school systems of other large cities.

The main provisions of this law, enacted in 1891, and of the ordinances based upon it, were as follows:

There was no board of education, and the powers usually vested in the board of education were given to the city, to be administered thru the common council.

The superintendent of education, elected at the general municipal election, altho nominally at the head of the Department of Public Instruction, was vested with little power with reference to the policies and the management of the school system. He could recommend the budget for current expenses to the common council, but the common council had full authority to reduce or to eliminate any item or to introduce new items of expense. He had no power with reference to choice of sites for new schools, or regarding the construction and equipment of new buildings. Moreover he could only recommend courses and textbooks, and the common council had complete power to determine

what should be taught and what books should be used in the public schools of the city.

The superintendent was directed to select teachers from the eligible list prepared by the board of school examiners appointed by the mayor, but need not take teachers in the order of rank. Teachers' salaries and the length of their contracts were fixed by the common council, the council thereby holding to a large degree the power to determine the character of the teaching force of the city. Moreover, the superintendent could not dismiss a teacher until after a hearing and with the concurrence of the mayor.

The board of aldermen, consisting of 27 men elected one from each ward of the city, had real control of the school system, subject to the veto power exercised by the board of councilmen and by the mayor. School matters coming before the board of aldermen were referred to the committee on schools, consisting of seven members who served on the committee for a term of one year.

Some of the specific powers exercised by the common council were as follows:

- (a) To determine the course of study, and textbooks.
- (b) To fix salaries of teachers and other employes of school system.
- (c) To prescribe tenure of teachers, and to repeal or modify such provisions at pleasure.
- (d) To determine the amount of funds for maintenance, operation and repairs, and for construction of new buildings within charter limits.
- (e) To determine necessity for new buildings, to choose sites, and to adopt plans and specifications.
- (f) To adopt ordinances relating to school management and discipline.

Under such a method of administering school affairs it was inevitable that the schools suffer in competition with the other city departmental activities. It is unnecessary to dwell further on the actual effects of ward politics upon a school system almost entirely in the hands of the board of aldermen than to say that the school situation was one of the most effective arguments used to prove the necessity for the Commission Charter.

That the results of the system were not still more unfortunate for the schools is due very

(Continued on Page 36)

A Successful Meeting of School Boards

(Department of School Administration of the National Education Association)

Meeting.

The Department of School Administration of the National Education Association held two exceedingly successful meetings on Wednesday and Thursday of the convention week. President O. M. Plummer had planned a live-wire program and his expectations for a large gathering of school board members were fully realized.

The first session in Aeolian Hall was opened with an informal address of welcome by Hon. William G. Willcox, president of the New York Board of Education. Mr. Willcox pointed to the necessity of applying in school board affairs, the principles and practices which are used in the administration of large corporations. He urged that the fundamental rules and laws of co-operative organization be applied by school boards to school affairs. Team work is especially valuable in school matters for altho individual ability and individual effort are necessary they are practically useless without co-operation. The best efforts of individuals are neutralized if they are not supplemented and strengthened by team work. Mr. Willcox urged the necessity of strong executives with ample powers but argued that strong men and women are needed in lesser executive positions, and that they should be encouraged to display their initiative and their powers of original thought so that ability may not exist alone in the highest official, the superintendent, but also among his associates. In closing, Mr. Willcox urged that school boards and superintendents work in agreement for the welfare of the school system.

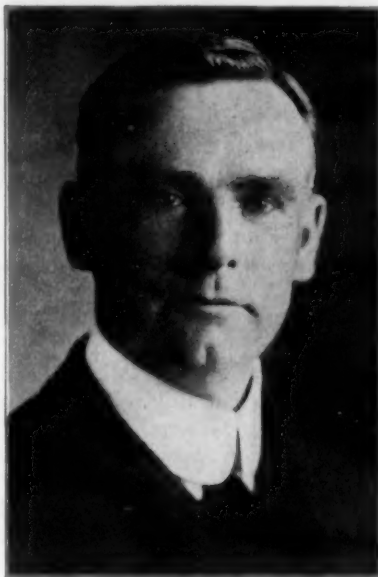
Dr. A. E. Winship responded happily to the welcome of Mr. Willcox and expressed the appreciation not only of the Department, but also of the Association in general, for the large enrollment and the elaborate reception given by the New York teachers and the civic committees. Dr. Winship congratulated the Department upon its revival thru the efforts of Mr. Plummer and closed with a plea for stronger interests on the part of boards of education in their labors.

Mr. Joseph Lee, member of the school committee of Boston, followed with a paper in which he wittily and sarcastically outlined the relations and functions of school boards and school superintendents. He argued that teachers should not be chosen because of their political affiliations or of other irrelevant, accidental conditions. Superintendents should have full executive functions and school committees should limit themselves to legislative matters. He declared that the greatest functions of the board of education are to educate the public to the need of better educational facilities and higher educational ideals. Mr. Lee's paper will appear in an early issue of the JOURNAL.

The Addresses.

The work of the Kentucky Illiteracy Commission was presented to the Department by Mrs. Cora Wilson Stewart of Frankfort, Ky. There is an element of the romantic in the work of the Kentucky educators who are promoting literacy in the Kentucky mountain districts and Mrs. Stewart presents the work of herself and her associates in a manner which makes it sound almost like a fairy tale. The staid members of the Department of School Administration laughed and wept with her as she related the adventures of herself and her fellow campaigners in teaching young and old in the moonlight schools of the Kentucky mountains.

Chancellor Edward C. Elliott of the University of Montana followed Mrs. Stewart in a plea for a definition of American educational principles thru a committee representing the



MR. O. M. PLUMMER,
President of the Department of School Administration,
North Portland, Ore

school boards of the United States. Dr. Elliott declared that a great struggle is going on at present between the professional heads of the schools and the laymen school boards who represent the people. The former have formulated a system of educational philosophy based upon tradition and study, and they resist any suggested modification of the courses of study which comes from lay sources. Dr. Elliott made the point that ultimately school boards are responsible for what is taught in the schools and that they should take a positive share in determining at least the fundamentals thru a well defined statement of principles.

Dr. P. P. Claxton, United States Commissioner of Education, explained in a brief, extemporaneous address, the present needs of the United States Bureau of Education, and the plans of the committee on education of the United States Senate which is soon to report a bill for national aid to vocational education.

The New York Situation.

Mr. Thomas W. Churchill, a member of the New York Board of Education, closed the morning with a discussion of the school situation in New York City from his standpoint as a member of the board of education. He took issue with Dr. Elliott that the present important conflict in education is between the superintendents and the school boards.

"The quarrel today is not between Boards of Education and the Superintendents or the teachers," said Mr. Churchill. "They are the wax and the wick—they both unite to give heat. The quarrel is not between them. It was a few years ago, when the Board of Education was in the cellar and we drew progressivism into the board and made it the cupola of the system. It seems to be a question of an itinerant cupola, however. It is more like an elevator; it has its ups and downs, and there are some things about that elevator that is like the old-fashioned elevator with a gas pipe at the bottom—the first to go down and the last to go up. However, we had our fight, if such it was—we can talk about that in the most humble way now that we have won—with the Board of Superintendents. I think we can be progressive enough to go to what is the real trouble now with the Boards of Education."

Mr. Churchill did not launch right into the faults of the Board of Education. He first told of the troubles which it had, and characterized many of the school Superintendents as "Rip

Van Winkles, getting high salaries while they sleep." Then he told of the attempt the board had made to obtain vocational education in the schools, and how it was checked by influences outside of the board.

"Behold, there came a rift in the clouds," he said. "We were going to have rational work in the schools. We went West with the idea of getting some one who would introduce vocational training in our schools. A great war broke out and the English bondholders wanted their money and New York was broke. Then the man we brought from the West—he had been brought for the purpose of efficiency—was diverted as an agent of economy. That man who came from Gary, Mr. Wirt, to help the vocational work has been used for the purpose of turning the schools into double sessions—which is a good thing—in order to eliminate part time. I have no comment whatever on that. What I do object to is the agent outside of the Board of Education affairs forcing theories of education upon us for any reason whatsoever."

"I had as much to do with bringing this innovation into the City of New York as any man, and I feel guilty for my gullibility. It was a good purpose. It has been diverted, and I am not making charges; I am not saying if I were in another position I would do the same thing, but I say the system that gives any one who is high in education, and is up for re-election, a warrant for interjecting any individual opinion—whether he is conscious of his rectitude or not—into the Board of Education, is a wrong condition. The change of city administration should not have any more to do with the policies of the Board of Education than the rumbling of a wagon going along the street has to do with the growth of flowers in a conservatory."

"What has been done is wrong, and the thing that we have to fear is not the conflict between the teacher or the superintendent, and one or the whole of the Board of Education, but the control of financial bodies that curtail the method of expenditure. All over the West—in Pennsylvania—the people have awakened to the fact that cross current in education is bad, and so let the Boards of Education levy the taxes and issue bonds and expend it without reference to whether the administration is Democratic or Republican."

Politicians That Vex.

"Then there are politicians of high degree that vex us. During the three years I was in office I never had a politician make any request that would not stand the flashlight—the steady flare of the searchlight. Why, they are the easiest people in the world to drop to. It is not the fellow with the thick shoes and the heavy mustache and the alleged diamond—they are not the fellows we should be afraid of—no, sin comes more coyly than that."

"In the last days of the Legislature there was passed a bill putting military training in the schools. Why, you would suppose there was money in it, it was passed with such avidity. It was one of the best concocted pieces of diabolical legislation that ever appeared—there were two bills, one the Slater and one the Welch. The Slater bill was a piece of evil. The bill said that we should have training in the high schools, have the boys drilled thru military training, and all that, and equipment enough to make them look like a Coxey army if they were dressed up according to the funds. If we were to follow the mandates of the Slater bill we would have to shut up a few more evening schools in order to furnish Coxey uniforms."

"There is something more important than military training in the schools and that is to

(Continued on Page 66)

The Business Man in the Public Service

Jacob M. Loeb, President of the Chicago Board of Education.

Generally speaking, we Americans know two types of men in the public life of our municipalities. The one is composed of men of legal training, the other of men of no particular training. Both make a business of politics and find a profit in its pursuit. Politics is always the main and often the sole business of their lives. Briefless lawyers or misfits from various vocations fill the large places in the public service. An aptitude for forensic declamation characterizes the one type, the ability to control votes, the other. "Neither," to quote James Bryce in 'The American Commonwealth,' "has any comprehension of political questions or zeal for political principles; politics means to them merely a scramble for places or jobs." These political conditions arise largely out of social and economic ones. There is as yet no large leisure class with time to give service to the community, no intellectual group with minds bent on political science, no independent wealth with inclination toward public affairs. Those who have leisure are engrossed in the pursuit of the light, vapid pleasures of life. Those who have education are devoted to less vital or perhaps more profitable studies. Those who have wealth are striving for still larger accumulations. In the main, there is no public spirit and the public service is left to the ill-equipped and the unfit.

With a better social attitude, with a more universal higher education, with a greater economic security, there should be promise of considerable and important changes. To speak of one of these is the purpose of this paper. I refer to the advent of the business man to the public service. I come to you as a businessman, and—in all modesty I say it—as a successful one. The businessman need make no apology because of the fact that he is in business, nor because of the fact that he is successful. Neither is he to be condemned for his business or his success, provided only his business has been properly conducted and his success honestly attained. He should not be excluded from, but should be welcomed in, the public service, for the very capacity which has made for the development and success of his business will make for the good and betterment of the public service. Business management and business methods are needed, sadly needed, in the public service. No one is better qualified to apply them to the public service than the independent and successful man of affairs.

We must differentiate between the businessman in the public service and the politician who has a business. The one is a new, comparatively rare and a desirable type. The other is an old, familiar and an undesirable type. The one brings business ability and experience to the solution of the problems of the public's business. The other uses his public trust and official position for the advantages of his private business. The one enters the public life because he has ideals, the other because he lacks them; the one for the benefit of the municipality, the other for personal profit; the one for the good of the service, the other for the good of the servant.

The businessman who enters the public service has no easy road to travel. The conduct of our municipal business has, in the main, been such as would involve a private business in bankruptcy. Its management has been loose, its methods slipshod and its trend shiftless. It has been characterized by favoritism, spoils and corruption. Political futures and party fortunes, not sound fundamentals, have been

its determining factors. Contracts have been let, and positions assigned with a view to currying favor or influencing votes, regardless of economies or efficiency. The businessman who deliberates and seeks the truth, who demands the elimination of waste and decries extravagance, who wants to put the municipal business on a business basis, meets with opposition. He is urged to do what is expedient rather than what is sound. If he refuses, he is threatened with political annihilation.

The businessman who enters public life must be prepared to make sacrifices not only of time which might be valuable to his own business, but more. He will be abused, his motives will be impugned. An established order resents interference. It resists change. The professional politician has so long been in undisturbed and comfortable control of municipal affairs that he cannot comprehend the participation of honest, capable and independent businessmen. He has drunk so long at the public trough that he cannot understand why anyone should come to the trough except to drink. He has stabled so long in the public stall that he chafes at sharing it with a newcomer. That the trough is not his alone or that the stall may need renovating is to him inconceivable. So the businessman who contests for a place beside him and who, forsooth, differs from him, has his purposes questioned, is vilified and vituperated. All of this must not deter him from continuing in the public service. It is part of the sacrifices which he must make in the community interest. It is part of the necessity which compels him to remain. It is part of the goad which drives him to persist. It is part of the proof positive and convincing that he is needed in the public service.

You will pardon me if I speak, nay, you will expect me to speak of the businessman in the branch of the public service in which most of us here are engaged, namely, the public education. There is no place which is more worthy of his time, his thought and his energy. There is no place for which he is better fitted, none where he is more needed. The business of the public schools is big and various. There is a large investment of the public monies. There are large holders of property, real and personal. There are tremendous incomes and expenditures. The product of that business is second in importance to no other. The child who is to be the future citizen of our municipalities and our nation is here in the making. That the investment may be safeguarded, that the property may be managed in a businesslike manner, that expenditures may be wisely adjusted to incomes, that the interests of the school child may be conserved, that they be not subordinated to those of designing partisans; for this the businessman is fitted by experience and training. It is true that he is not qualified to arrange the curriculum nor to select school teachers. That these functions lie far from his proper field is beyond question. But it is also true and should and must be beyond question that they are neither the function of any person nor power, other than those of the trained educators—the general superintendent of schools and his staff. It is for no faction nor class to say what the child shall be taught or who shall teach him.

I have no quarrel with trades unions properly conducted and in their proper places, but a trades union in the public school is intolerable. Teaching is not a trade. It is a profession and one of the noblest professions. In principle and in practice, trades unionism is

inconsistent with and unnecessary to a professional career. In the schools, it makes for a divided allegiance; it breeds suspicion and discontent; it destroys harmony and creates strife; it interferes with discipline and halts efficiency.

The young teacher comes into the service full of enthusiasm for her work. Her thoughts are engrossed with the children. But no sooner is she engaged than the union sets to work poisoning her mind. She is told that she cannot stand alone, that her enthusiasm and her capacity will not win her recognition, that she must look to the union, as if she were in a trade, either for promotion or salary increase. "The slogan of the union," she is told, "is not children first, but teachers first." She is made to view herself as a victim. "Her employer, the Board of Education," she is led to believe, "is trying to crush her and to keep her down." Class prejudice is encouraged and class hate engendered. Her ideals are shattered. She had hoped to devote herself to a noble and sacred calling. She finds herself in a sordid, salary-grabbing and self-seeking occupation. She is cajoled, then threatened, should she still not affiliate herself with the teachers' union. If she submits, she pays her fees as peace insurance and keeps silent to avoid trouble. If she resists, she feels the subtle and intriguing lash of the persecutor. In either event, she is terrorized, and the school children suffer. The inner circle, the few in sympathy with and in control of the union—openly dissatisfied, contemptuous and rebellious toward those in authority—send forward children who in turn are likely to be dissatisfied, contemptuous and rebellious toward authority and to have no regard and no respect for law and order.

I am not theorizing nor drawing on my imagination. I am stating facts as I have actually found them. Not fitness but allegiance to a class, not efficiency but membership in a trades union, in my experience, have been the tests by which a teacher's right to position or a promotion were determined. Beside the subterranean influence at work in our public school system; beside the high handed methods employed—sometimes secretly, sometimes openly and barefaced, but always thoroly organized—the influence, the fraud and trickery which characterize the lowest type of ward politics; the violence and graft of the labor movement, which even its most ardent admirers will not defend, pale into insignificance—pale because those influences are at work and those methods employed to the lasting detriment of the most delicate, the most plastic, the most sacred charges which God has given us—the mind and soul of the school child. They are made the plaything, the shuttlecock of a small, ambitious and designing coterie, blinded to everything but self by a lust for power and dominance.

No other learned profession presents such conditions. No other is unionized. Bar associations—medical societies—engineers', architects' and ministers of the gospel in groups—are maintained for the free interchange of new and valuable ideas. They are intended for the good, not the degradation of the professions. Men devoted to higher education and scientific pursuits have their associations. But none of these meets and exists to discuss fees, pay and so-called "working condition." By all means let us have a teachers' organization. But let the leadership go to the best teachers, not to the most astute politician. Let the organization discuss problems of education, not the problems of self. "No servant can serve two

(Continued on Page 64)

How Some Pupils Study

W. G. Bate, Mankato, Minn.

Directly opposite opinions are held by various people as to the amount of studying required from the average high school pupil. The real problem, however, seems to be how much ineffective studying is being done and whether or not a great deal less is being accomplished in the time spent than might be accomplished by better and more effective study habits on the part of these pupils. It is probable that most of our pupils study long enough and hard enough but it is questionable whether they are accomplishing adequate results.

How pupils study is a practical problem that confronts every high school faculty. The following results from a study thru examination and observation of a group of pupils numbering nearly three hundred seems to indicate what is probably a typical condition in high school life. In the light of varying opinions, the information as given by the pupils themselves is interesting.

Time Spent on Lessons.

The first phase of the problem of how pupils study is the amount of time spent on the average lesson in different courses. Teachers do not always agree as to the amount of time necessary to the preparation of the lessons assigned, but it seems to be a rather uniform notion in this school that the average lesson will require about one period or forty-five minutes of study. If this be true, the average pupil will have to spend about forty to sixty minutes in study outside a seven period school day and many will have to spend more than that amount. The following figures as to the time spent were furnished by the pupils themselves.

Time Spent in Study.

Course	Less than 30 minutes	30 to 45 Minutes	45 to 60 Minutes	60 to 75 Minutes	75 to 90 Minutes
Average lesson..	6%	56%	15%	21%	3%
English	19%	68%	8%	5%	0%
Mathematics ...	34%	18%	32%	14%	2%
History	8%	46%	11%	27%	8%
Languages	4%	24%	7%	35%	30%
Science	25%	59%	10%	6%	0%
Domestic Science	49%	42%	6%	3%	0%
Agriculture	24%	61%	15%	0%	0%

From these figures, it is obvious that the average lesson is taking less than a period of time for study. However, while the median is below the forty minute mark, there are a great number using more than that amount of time for the average lesson. The greatest amount of time is apparently being used in the languages, mathematics and history. It is perhaps possible to say that the average pupil is spending more than a period of time on these subjects, and less than a period on the others. Those lessons which are mostly laboratory in their nature have been omitted from this list.

It seems that relatively less time is spent on the preparation of English than on any one subject requiring considerable preparation. The question immediately presents itself as to why this is true. Is it possible that pupils are able to absorb their English in class after a hasty and superficial study, or is English easier to get, or is less work required in that subject? Why should 87 per cent of the pupils spend less than forty minutes on the average lesson in English, while but 57 per cent can get the average lesson in history in that time?

The significant point here seems to be the fact that there is a wide range of difference in the amount of time required for study in the different courses. A great many questions might be raised as to why this is true. It might

be asked if the English should properly take less time than the average lesson in history, and why. There may be a great many reasons for this variation, but it is not our purpose to discuss these reasons here. One thing, however, it seems possible to conclude, and that is that no great per cent of the pupils are being overloaded, even on their own confession. If then this amount of time spent could be lessened by better and more effective study methods, the necessity for which appears below, it seems reasonable to conclude that more could be accomplished in these courses than is now the case.

Study Habits of Pupils.

It is a matter of agreement that study is primarily for the purpose of understanding subject-matter, and secondarily for the purpose of learning how to do a thing. We have reached the point where we have little faith in learning how to do a thing without understanding it. Such a procedure is the process of the factory and not of the school. Teaching how to do a thing without teaching how to understand it is not good teaching. Studying to learn a thing so as to be able to repeat it or do it without understanding it avails little or nothing. The question then arises as to how much of the studying done by the average pupil serves or tends to serve as a medium of understanding the subject in hand, and how much of it is of the character which permits the fastening of the symbols in the memory long enough to make a recitation or write the answers in an examination, only to be forgotten afterwards. In other words, how much of our pupil's studying helps them to think, reason, form judgments and retain thru understanding the subjects they study? Are high school students using methods of study which are memory processes or are they learning the power of independent thinking? The following figures furnished by the pupils may indicate some of their habits along this line.

Study Habits of 280 Pupils.

(Answers to direct questions.)

- Do you read your lessons aloud?
No—175. Yes (regularly)—25.
Sometimes—32.
- Do you say your lessons to yourself or to someone else?
No—90. Yes—114. Sometimes—19.
- Do you review your former lessons?
No—30. Yes—before examinations—156.
Sometimes—35.
- Do you underline your texts?
No—114. Yes—89. Sometimes—27.
- Do you outline your lessons?
No—105. Yes—66. Sometimes—67.
- Do you have a definite time for your studying?
No—110. Yes—145.
- What do you find most helpful in studying your lessons?*
1. Writing out lessons or outlining so as to remember77
 2. Reading the lesson out loud.....40
 3. Reviewing the lesson more than once....21
 4. Saying the lesson over to myself.....20
 5. Getting down and working hard..... 9
 6. Being where it is quiet..... 8
 7. Underlining the text..... 8
 8. Saying the lesson to someone else..... 6

*(Given by pupils.)

There are some differences in the answers to the questions on habits of study and the methods given as the most helpful by the pupils. It is probably fair to conclude that in many cases what is conceived to be the most helpful is not regularly used by the pupils. Considering the

first set of answers, we see some of the things that are done by the pupils in their preparation of lessons. It is noticed that for the most part pupils do not regularly read out loud. That is to be expected inasmuch as there is no opportunity for that sort of studying in school. On the other hand, there are a large number who follow the practice of saying their lessons over to someone else or to themselves. Saying the lesson over smacks very much of the habit of trying to memorize what is in the lesson so that when a question comes in class, the pupil will be ready to answer. There is here no particular indication of studying the lesson so as to be able to understand it. This is studying to remember so that the pupil will be able to recite well. The question then arises as to how much of this sort of thing is stimulated by our teaching methods. There is little doubt but that a certain amount of drill and memory testing is done legitimately in every course. However, from observing recitations, it often seems a question as to whether the teacher is better satisfied with recitations in which the pupil is led on to see relationships, even tho it take considerable prompting and drawing out by the teacher, or whether the teacher is better satisfied with the recitation that is a glib recital of the content of the book. How often does the teacher think and say, "Very good," after a recitation in which the pupil has demonstrated that he has remembered well, and fail to comment favorably upon the recitation in which after a long struggle, the pupil has seen the point involved. How often when the pupil stumbles and falls in recitation does the teacher ask, "What did the book say?" or "Don't you remember?", instead of "What is the next step?", or "What do you think about that?". The point that seems obvious is that so many pupils do study to remember and are complimented on it. The pupil who fails in recitation very often fails not because of his inability to understand, but because he failed to remember. A short time ago a teacher came to the office for advice concerning a failing pupil and in her description of his work, said: "He seems unable to remember a single thing. I have tried to help him by showing him what to learn and by giving him special lists to study, etc." Apparently that teacher did not think to investigate the understanding power of the failing pupil, and when she did it, she found that the boy was by no means a failing case. In the eleventh and twelfth grades, the writer has experimented with pupils and has found repeatedly that pupils reply to a searching question with mere statements of fact. Quiz papers reveal the same tendency. The indication here is that these pupils have learned to memorize well. Failing pupils in history, when asked about their difficulty, say, "I can never remember history very well." Rarely do they say that they can't understand it. The necessity to remember is the uppermost thought. True that it is important, but if understanding the subject came first, would remembering be so difficult? Are we requiring memorizing and emphasizing it? Do we dismiss our class with the admonition to study so many pages or to "learn it"? Is it efficient to study long hours in order to remember, using great mental energy, or is it more efficient to try to understand and expect to remember because of this understanding? Again we must bear in mind that thruout all these courses, a certain amount of memorizing is essential. Facts must be memorized and very

(Continued on Page 77)

MECHANICAL EQUIPMENT OF SCHOOLS

Harold L. Alt

Part XV—The School Swimming Pool

Schools in which swimming pools are installed are becoming more common every day, and among the newer schools recently planned or already in process of erection, pools are the rule rather than the exception. This applies of course to buildings of reasonably pretentious character and where other facilities are similarly complete. As all indications seem to clearly point toward the increased use of pools in the years to come, it is essential that they be viewed from a proper standpoint and considered with regard to their operating cost as well as initial outlay.

Painful as the fact may be to the ardent advocate of the pool, it is undoubtedly true that

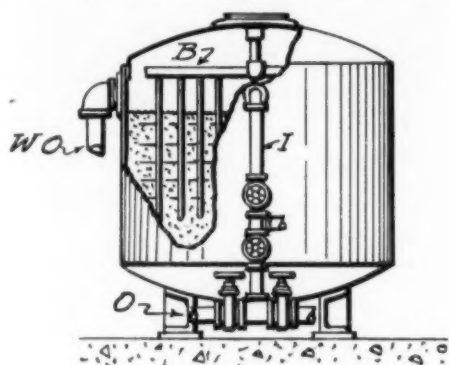


Fig. 131.

pools are far from being an unmixed blessing. They are expensive to install, require some expenditure to maintain, must be provided with one or more attendants, must be heated, should have rigid sanitary rules enforced to prevent their becoming a source of danger and, altogether, are more or less of a responsibility.

Accidents, too, have happened such as occasional drownings, diving into a pool basin after the water has been withdrawn, striking the head on the bottom when diving, etc., etc. True, such accidents are comparatively rare, yet they are not so impossible as to have already actually happened.

On the other hand the increasing popularity of the pool shows its capability for assisting hygiene by promoting bodily cleanliness—not so much with the idea of actually *washing in the pool* as by making the pool act as an inducement to take the good shower bath *required before* entrance into the pool is *permitted*. Many schools are also making their pools serve others besides the pupils of the building, each building being thrown open on evenings and Saturdays to the entire adult population of its respective district. This is falling directly in line with the increasingly popular idea of making a school, not only a place of learning, but in truth a community, or civic, center.

While accidents are indeed possible, the presence of an instructor, combined with clear water in the pool and good light will make the danger sufficiently remote to be reasonably neglected. Undoubtedly the greatest danger is from the spread of disease thru the medium of the pool water. This, if not guarded against, is indeed a most serious danger. Yet it *can* be effectually guarded against, and science has made the pool operated along modern sanitary lines entirely safe.

The simplest method of obtaining pure water in the pool and one that readily suggests itself when contamination of pool water is considered is to *run in fresh water!* This seems so simple, so efficient and so satisfactory a solution of the problem that it should be entirely unnecessary to go farther. Now, there is little to be said against such a procedure until the bills for water

(and coal to heat the water) begin to come in; and the worst of it is that these bills will keep growing and growing, as the pool becomes more and more popular, until they become excessively large.

Yet facts are facts! In dollars and cents the ordinary pool costs about \$5 to heat with coal at \$5 per ton and about \$7 for water with water at \$1 per thousand cubic feet. This makes a total cost of changing the water in the pool of \$12 each time, and this brings up the question of how many times the water must be changed in a year.

When it is remembered that with this method the water enters the pool directly from the city mains (or other source of supply) and—from the time the first user enters the pool until it is finally run off and a new change of water run in—constantly and continuously increases its bacteria and other impurities, it can be seen that a considerable quantity of fresh water must be used to dilute the impurities a sufficient amount so as to render them negligible. Actual experiments in pools operated under this plan show that about 25 gallons of fresh water are required for each bather who uses the pool, and the frequency of change, therefore, depends almost entirely on the number of users. Supposing 200 persons use the pool each day. This means 5,000 gallons of fresh water per day, or a complete change of water once every ten days. With four hundred users the pool would have to be changed every five days, etc. The average practice seems to require a change about once a week so that in a year the cost of coal and water will amount to about \$12 x 52 or \$624 per year. And remember, with this method there is no guarantee of freedom from bacterial dangers—for while the danger is *lessened* it is not *entirely* removed by any means.

On the other hand a pool can be equipped with mechanical devices which render the use of heat practically nil and which keep the water in a purer condition than when it originally entered from the city main. So far as cost is concerned these devices can be paid entirely in three or four years out of the saving made over the cost of operation when raw water is used all the time. This plan of operation involves the use of heaters, filters, sterilizers, aeration, and a co-agulant feed into the water.

In purifying swimming pool water it has been found necessary to

(a) Inject a co-agulant which causes the impurities to lump or clot together so as to be easily strained out.

(b) Strain out all coarser impurities by driving the water thru a filter just as water is filtered in nature by passing thru the porous rocks.

(c) Kill various dangerous or undesirable bacteria by means of sterilization, either by the addition of a chemical or by electrocution.

(d) Mix the water with air—called aeration—to oxidize certain bacteria and to combine minute particles of air with the water so as to make it bright and sparkling.

While these processes sound rather formidable they are comparatively simple, the co-agulant being a simple solution injected into the water on its way to the filter so as to make the impurities more easily caught thru co-agulation or the formation of larger particles. The co-agulant (usually alum is used for this purpose) is placed in a plain iron cylinder and part of the pool water going to the filter is bypassed so as to run thru the alum chamber. As a result a small part of the alum is dissolved and mixed with the pool water before it gets to the filter.

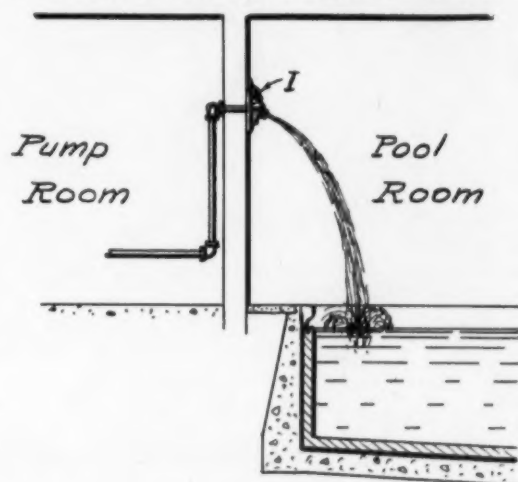


Fig. 132.

The filter is a common cast iron shell in which sand, quartz, bone black, charcoal or other medium is used and thru which the water is forced. A sectional view of a common type of filter used for this purpose is shown in Fig. 131 in which I indicates the inlet, O the outlet, B a breaker to stir up the bed and WO a wash-out pipe for running off the discharge when washing out the filter bed.

The sterilizer may be similar to the co-agulating receptacle except that hypochloride of lime is used. The sterilizer may be of more pretentious character utilizing electric current and killing bacteria by means of the ultra violet rays, similar to the process described for the sterilization of drinking water.

Aeration is secured by allowing the water to shoot thru the atmosphere. It is generally effected by spraying the water as it enters the pool or by letting it fall from some high point into the pool, as shown in Fig. 132. In this figure, I indicates an ornamental inlet such as a lion's head, etc.

Supposing this equipment is installed, how long will it be possible to retain the water in the pool and in what condition would it be at the end of the period? In answer to this the

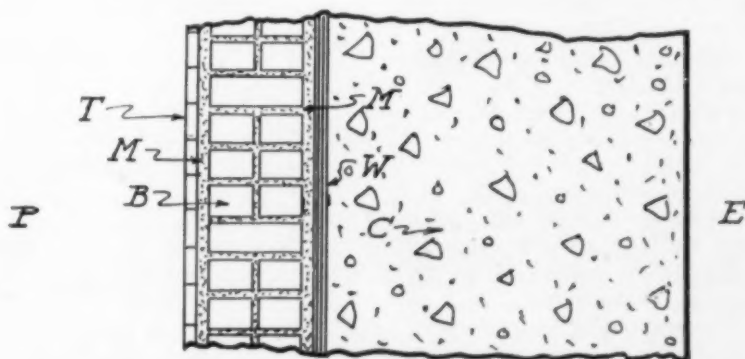


Fig. 134

rather surprising statement can be made that the water may be used indefinitely and, more astonishing still, that the water can be maintained at even a higher degree of purity than its original natural state! In other words a pool of water after being in use constantly by bathers for even as long a period as *three years* is in a *purier state* than any natural drinking water. This has been proven by actual scientific tests on pools after such periods of use. From this it can be seen that when pools are properly installed and operated they can be maintained at such a degree of purity as to make talk of contamination a joke, except to the ignorant.

In connection with this it is interesting to

filtration of which 100 per cent filter the water entering the pool, 64 per cent use re-filtration to maintain purity, 20 per cent use lime and 2 per cent sulphate of copper in addition; another 2 per cent employ all these three methods.

(g) About 60 per cent have scum gutters.

Certain accessories accompany a pool such as shower baths, lockers, towels, suits, etc. Lockers must be provided for each occupant of the pool, and showers should be arranged for bathing purposes besides the ones installed exclusively for pool use. As a general thing the locker rooms are designed so as to be utilized either for gymnasium or pool purposes as desired. Of course where outsiders are allowed to use the pool this

a 50,000 gallon pool the weight of water alone approximates 250 tons. On this account the favorite pool location is in the basement where it can be set directly on the ground and no other structural supports are needed.

For a school pool where both sexes are to be served, it has proven a great success to locate the pool in the middle of the building making one end of the basement a "boys" section with the boys' lockers, showers, play room, toilets, etc., and the other end of the basement a "girls" section with similar equipment for the girls. Then, by opening a door from either side into the corridor leading to the pool, direct access for either boys or girls into the pool can be obtained as

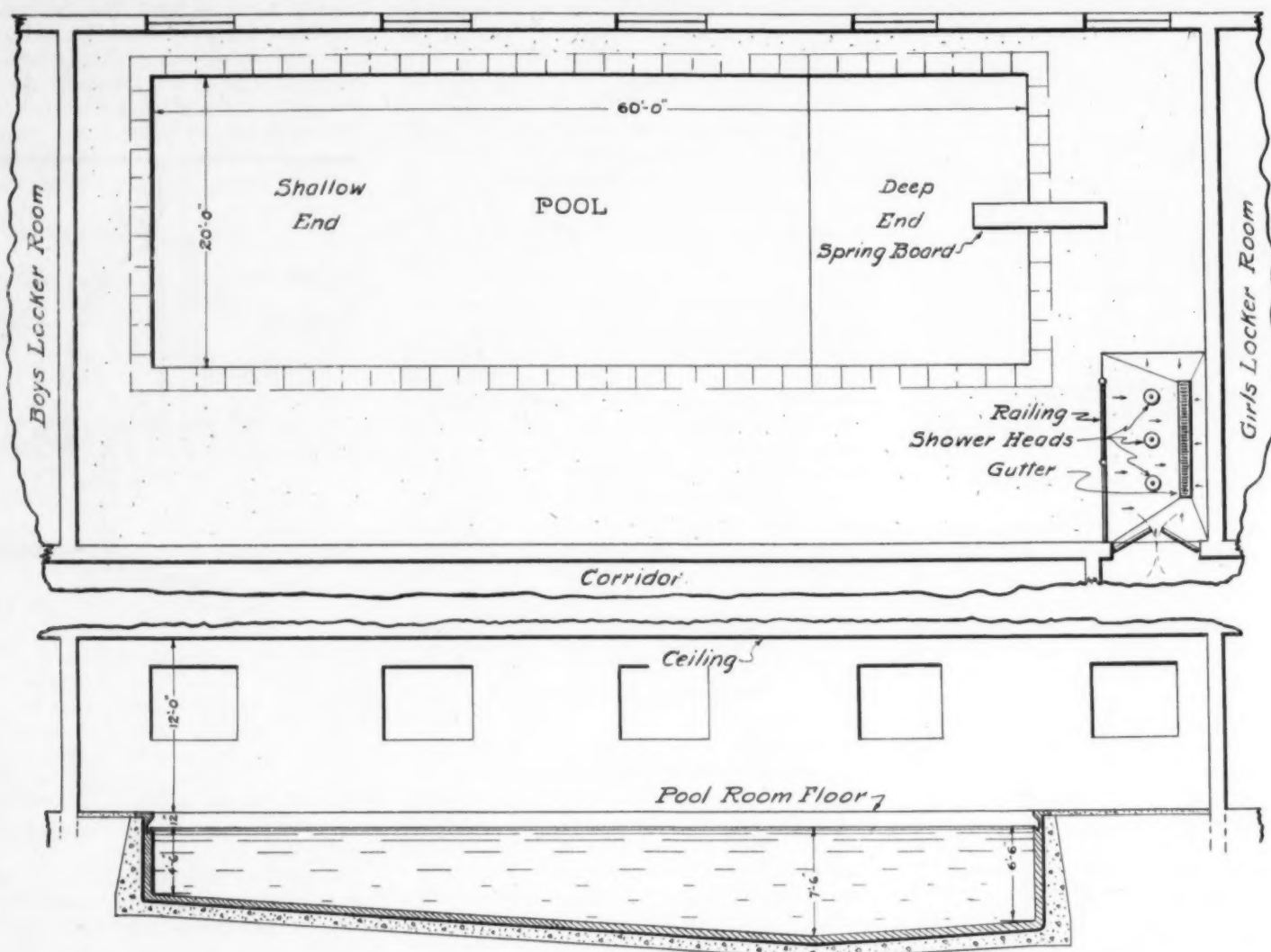


FIG. 133.

note the existing practice along this line, as shown by queries sent to some five hundred pools taken at random thruout the country. While replies were received from over 50 per cent of the pools the results shown by these answers may be assumed to cover the average conditions in the United States especially on the older pools.

The answers showed that roughly,

(a) The average capacity of pools is 50,000 gallons and 94 per cent are rectangular in shape running in size from 20 x 10 feet to 140 x 65 feet.

(b) Some 68 per cent receive natural light either from skylights or windows.

(c) The average temperature maintained is about 74 degrees Fahrenheit.

(d) The pools where purity is maintained by re-filling with fresh water amount to about 66 per cent of all the pools.

(e) Out of such pools only 4 per cent refill daily, 14 per cent every other day, 18 per cent twice a week, 2 per cent every five days, 50 per cent every week, 8 per cent every ten days, 5 per cent every two weeks and one pool only every 30 days.

(f) Some 34 per cent of all the pools employ

is not possible but where school pupils alone are to be considered such an arrangement is usually adopted.

In connection with the locker rooms and often in the same room individual showers are installed for rinsing off after gymnasium practice and for the use of those who do not desire to enter the pool. Such showers are not used in any way connected with the pool and are solely for gymnasium or other outside use.

The showers for the pool users are commonly installed between the entrance to the pool room and the pool itself; the idea being to force all users to remain at least a full minute under the shower before entering the pool. By this means the shower washes off and disposes of much of the coarser impurities which would otherwise be carried into the pool and where they would contaminate the water very rapidly.

Supposing that it has been decided to install a pool, the first thing to be determined is the location and size of the room. While it is entirely practical to install a pool on an upper floor—this having been done in more than one case—it can hardly be recommended as an economical proposition owing to the great weight of water and walls to be supported. In fact in

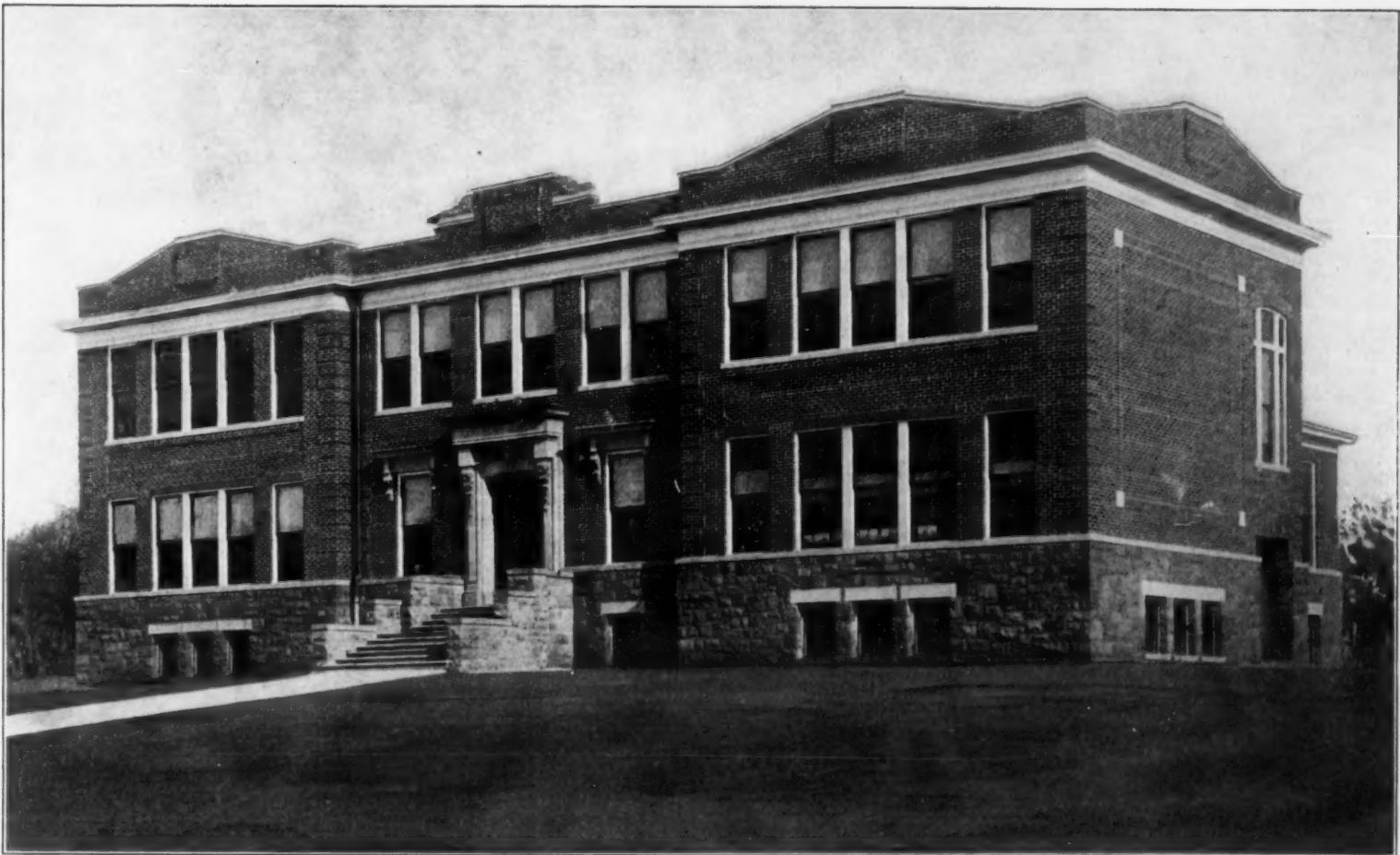
desired without danger of conflict between the sexes.

Fig. 133 shows a typical school pool of standard size, viz., 20 feet wide by 60 feet long. Usually the shallow end is made with 3 ft. 6 in., to 4 ft. 6 in., depth of water, and the deepest portion with 7 feet to 7 feet 6 inches depth. The pool showers are shown in the shape of three heads set over a gutter directly at the door entering the pool room. These heads should be controlled by a valve operated by the instructor who should see that each pupil gets a thoro drenching. It will be noted that the boys' locker room and girls' locker rooms are located adjacent but on opposite sides of the pool room.

The most economical way to build a pool of substantial construction consists of erecting concrete retaining walls with a reinforced concrete bottom, thus forming the rough shell to retain the water. Concrete and other masonry, however, is not watertight by any means and on the inside of this shell must be placed a waterproof membrane to retain the water and to prevent leakage.

The waterproofing is most commonly obtained by coating the walls and bottom with hot pitch,

(Concluded on Page 180)



HARRISON SCHOOL, NORTH PLAINFIELD, N. J.
John Noble Pierson & Son, Architects, Perth Amboy, N. J.

TWO UNIT SCHOOLHOUSES

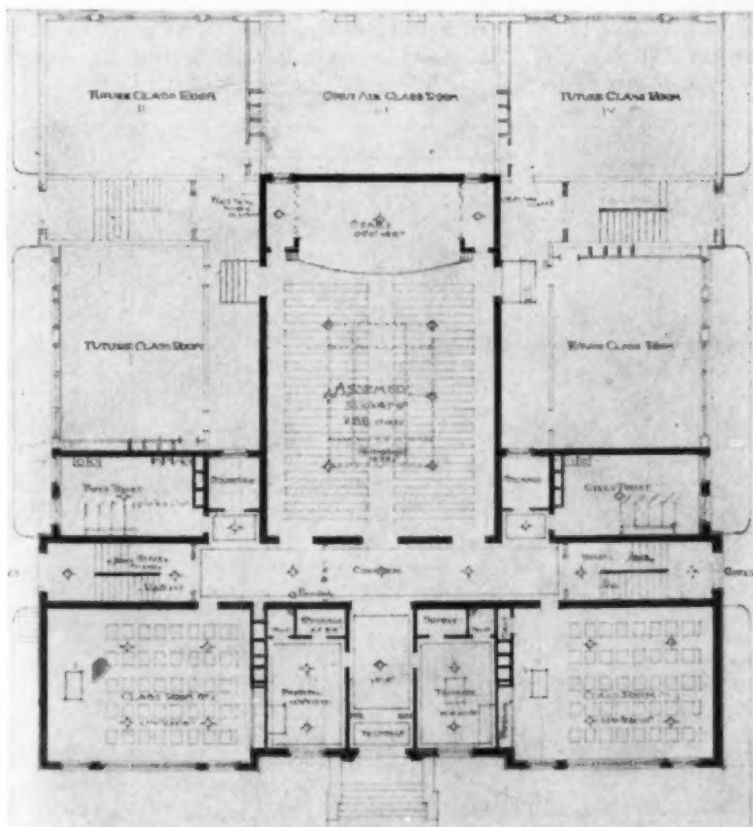
Burton H. Allbee, Paterson, N. J.

One of the most serious problems school boards in small and medium sized towns have to face is the erection of buildings. Cost has come to be such a nightmare of most members of these boards that they scarcely know which way to turn when the time comes that a new building must be erected. Therefore, anything which

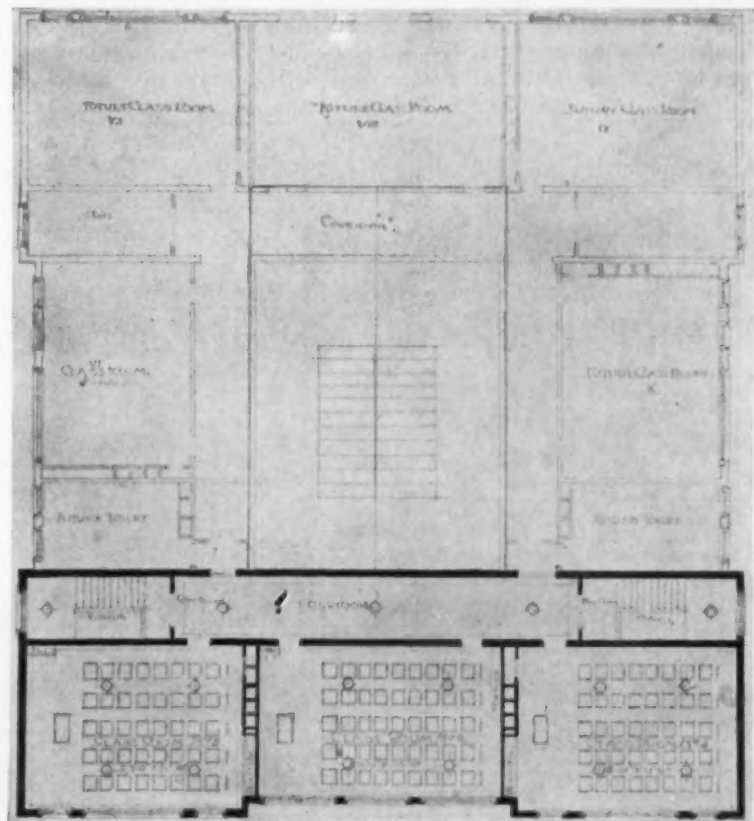
tends to help in the solution of this troublesome and very real problem deserves the attention of these who must meet the question. And the difficulty isn't confined to one part of the country. All alike feel its effects and all alike search for some solution which will help in smoothing the way they must travel in their

effort to give the pupils under their charge the best building they can and secure it at the lowest possible price for the good of the parents who must pay the bill.

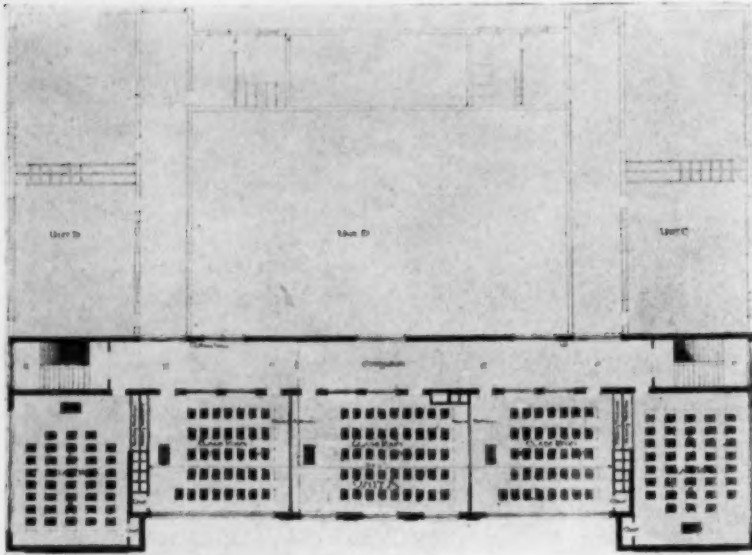
One real trouble of the past has been the fact that while a building may be sufficiently large for the purpose today by another year or two



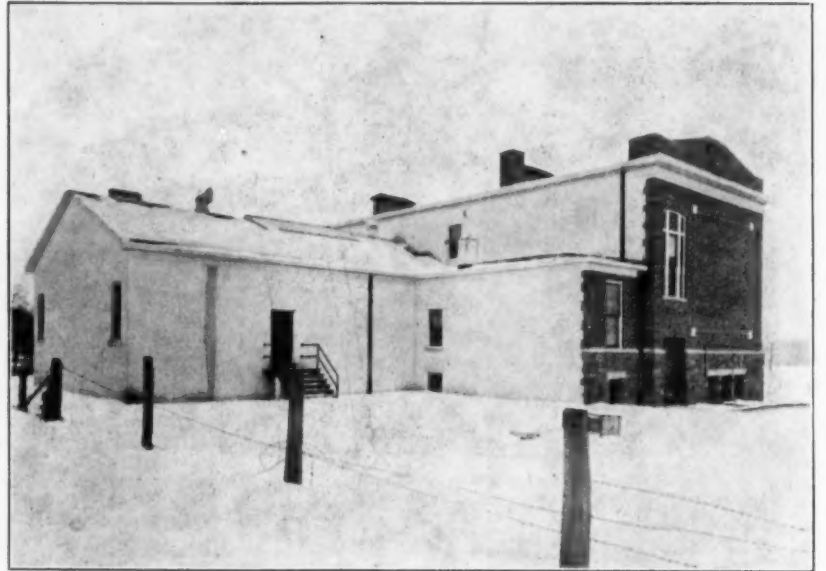
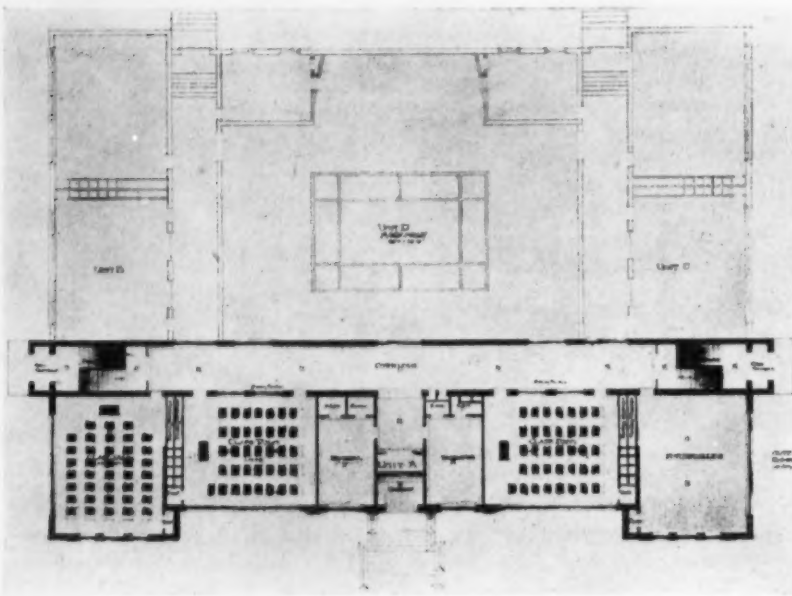
FIRST FLOOR PLAN, HARRISON SCHOOL.



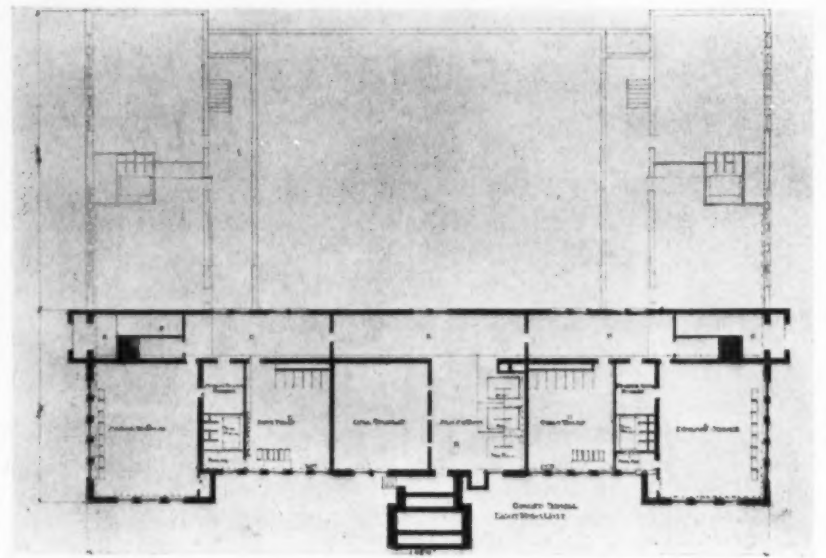
SECOND FLOOR PLAN, HARRISON SCHOOL.



SECOND FLOOR PLAN, LINDEN SCHOOL.

HARRISON SCHOOL, NORTH PLAINFIELD, N. J.
John Noble Pierson & Son, Architects.

FIRST FLOOR PLAN, LINDEN SCHOOL.



BASEMENT PLAN, LINDEN SCHOOL.

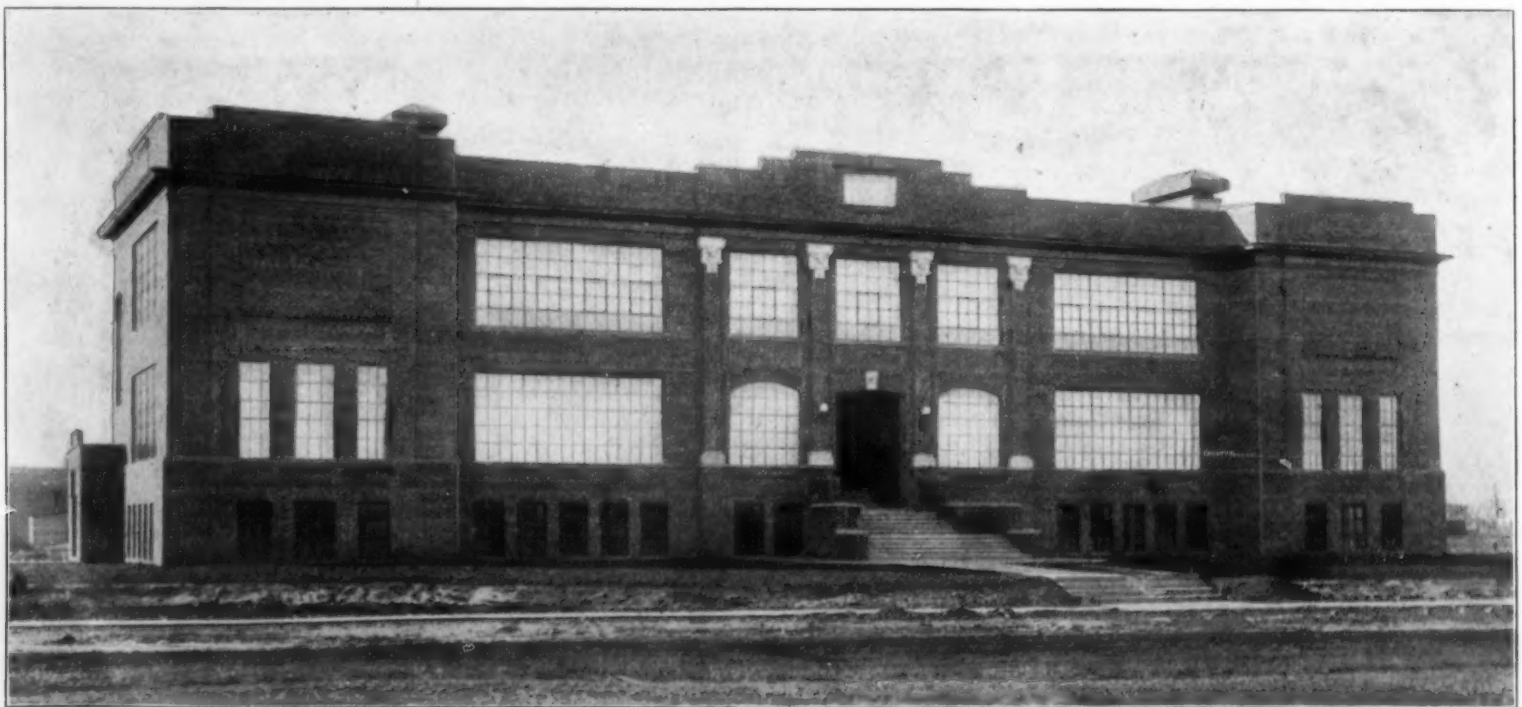
the population of the community will increase to such an extent that it will be too small. And this, too, is the same everywhere. Practically all communities are growing; the school building put up this year, within a year or two, will

be too small and the same process is necessary, with another expenditure of money. Sometimes school boards are sharply criticised because they do not provide for the future. But it isn't always easy to determine what the future is to

be in one's community and sufficient unto the year is the necessity of providing for the present.

In Perth Amboy, N. J., lives a young architect who has made himself known all over the

(Concluded on Page 76)

NEW SCHOOL, LINDEN, N. J.
John Noble Pierson & Son, Architects, Perth Amboy, N. J.



INDUSTRIAL ARTS BUILDING, STOCKTON, CAL.

Prevocational School, Stockton, Cal.

Geo. Henry Jensen, Principal

The Stockton Prevocational Shop Building was originally designed as a manual training center where advanced woodworking and metalworking were to be made available for eighth-grade boys. It was also intended that this building should serve two schools as a manual training center for woodworking.

The structure is entirely of wood, with concrete foundation, and has a concrete foundation thruout under the wood floor. The architecture is of the Frank Lloyd Wright type.

This new building is located on the back of a lot and its length comes within a few feet of reaching across the width of the lot. The old

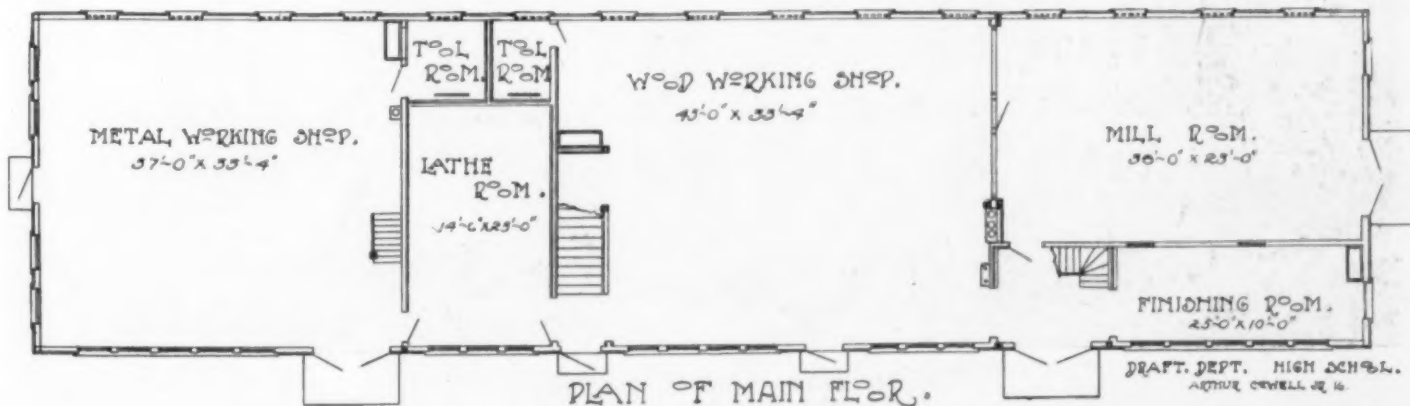
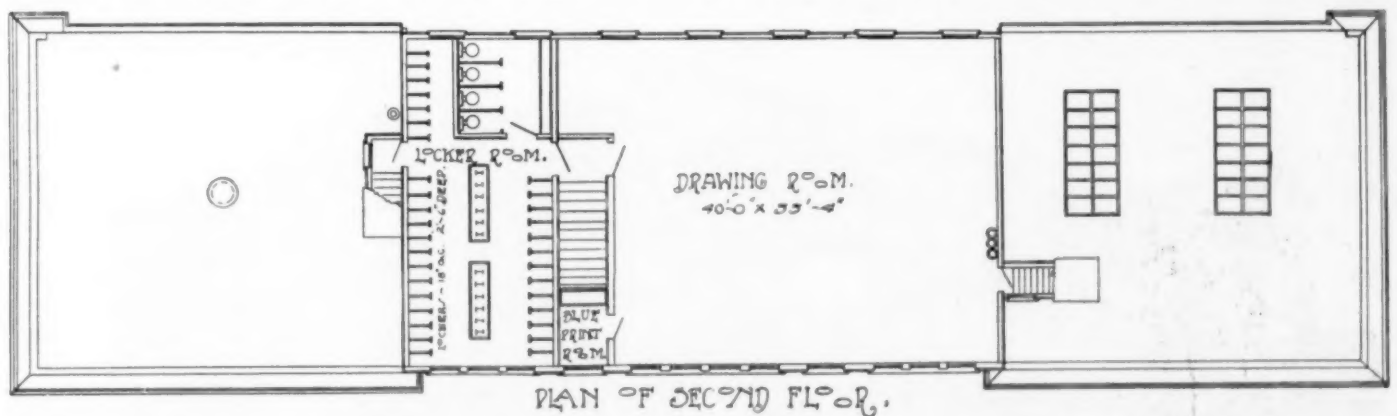
building which houses the print shop, academic and household arts work of the school, fronts up quite to the street on the same site.

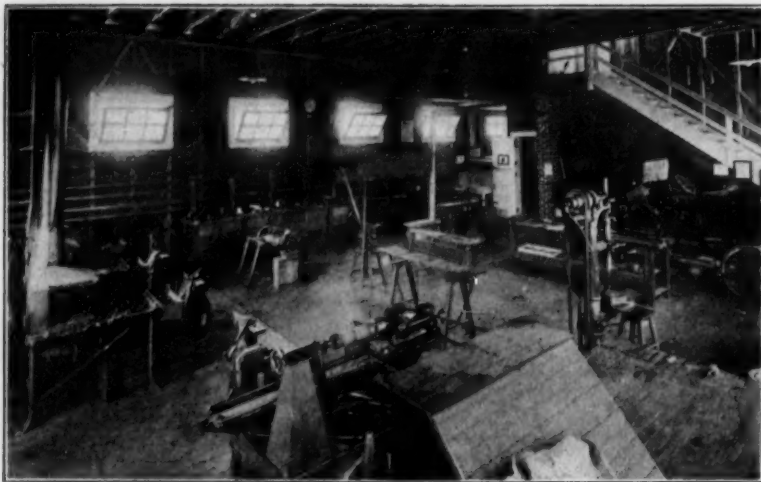
When the building was planned, due to the limitation of building space and funds, separate shops for sheetmetal, forging, machinework, automobile work, etc., were not available. Instead of using the metal apportionment for a separate forge shop, it seemed best to provide for the combination metal shop, as the first floor plan shows. This metalworking shop is equipped for forging and sheetmetal work, with the usual hand bench machines, squaring shears, etc., three forges, punch and shears, anvils, motor grinder,

drill press, engine lathe and necessary small tools. The wood turning lathes in the room just off the metalshop, are also available for hand metalturning, drilling, polishing, etc.

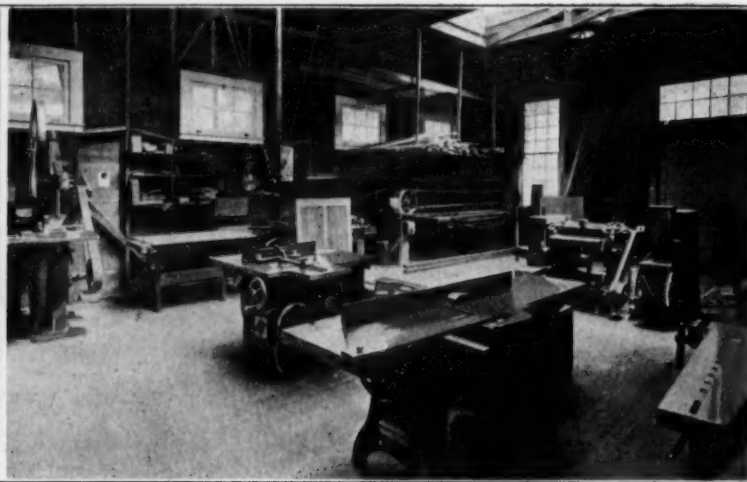
An automobile pit has been dug and an automobile of standard make has been made a part of the equipment.

The tool room just off the metalroom is used for storing the general tools. A boy is in charge at all times. The students get tools from the tool room by check, the same as is done in commercial plants. This tool room has also a switchboard, with individual switches for each motor in the shop, and the toolroom boy takes





Metal Working Shop.



Mill Room.

orders with reference to these switches from the instructor only. In this way the instructor knows at all times who is using a motor or machine.

The woodworking department has the use of the remainder of the first floor. It includes a millroom and a benchroom equipped with the usual machinery and benches for a manual training class. A toolroom for the woodworking department, similar to the one in the metalshop, also proves a vital part of this equipment.

The wood turning room is really a part of the woodworking department, but as already stated, it serves a double purpose in that it also is used by the metalworking classes. Five lathes are housed in this room at present, but the room is designed to take care of ten more at a later date.

All of the rooms in the entire building are adequately lighted. They are also equipped with electric lights for night work. Individual drops are provided in the drawing room and lathe rooms, so that each operator can do accurate work by artificial light.

The large drafting room on the second floor has been used during the past year for drawing only. The room will be divided, however, to make room for the electrical department as soon as it is organized. The drawing room is used by all the shops.

The locker and washroom serves the shops in this building and the boys from the old building as well. The lockers are many times larger than the small cramped type usually found in school shops. They are 18 inches between centers, 42 inches high and 30 inches in depth, making it possible to really store material in same, and not leave it scattered about in hallways and shops as is so often the case.

Organization of the Prevocational Courses.

During my first year as director of Manual Arts in Stockton, I found a great many boys in the grades who were from one to four years older than their grade, and who were decidedly out of harmony with the existing school work. This prompted me to recommend the organization of a prevocational school beginning with the sixth grade, for the boys who were 13 years of age and over. Only one teacher was available for the academic work so that we were obliged to limit our activities to two shops. It seemed advisable to choose printing and carpentry. The classes were limited to sixteen boys. Thus it came to pass that this school planned as an industrial arts center, houses the nucleus of a prevocational school.

The school day extends from 9 o'clock in the morning until noon, and from 1 o'clock until 4 o'clock in the afternoon. During the half day when academic work is done, a recess of fifteen

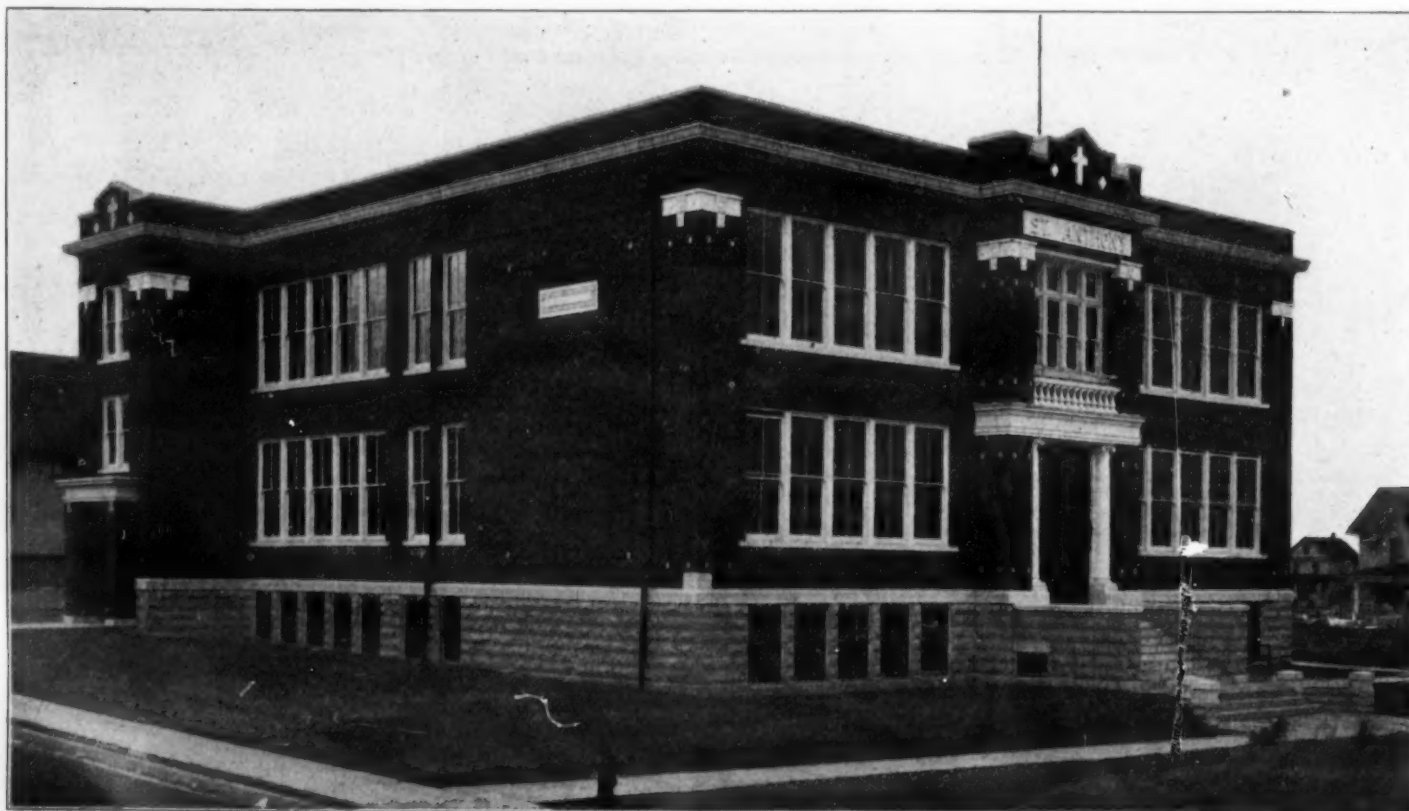
minutes is given. The academic work includes English, arithmetic, history, geography and hygiene for the worker, thus differing little on the surface from the regular sixth, seventh and eighth-grade work, except that the special teachers in drawing, music, and penmanship are not given time on the program. The drawing is given in connection with the shopwork. The penmanship is given in connection with the work in English.

In the print shop work, strong emphasis is placed on the design of the printed page. All of the students receive instruction in composition, press work, inks, paper, layout, cutting stock, make ready work, punctuation, proof-reading, estimating, etc.

A great deal of printing has been done for the school department during the past year. Among the jobs turned out was a 72-page book, 4½ inches by 6½ inches in size, for supplementary work in grammar. The Prevo Record, a school publication, has been issued monthly since January, 1916, and the commencement issue consisted of forty pages.

In the carpentry shop work of a very elementary nature has been given. As soon as a boy has made fair progress in the hand processes, he is permitted to work on the machines. The progression is such that each obtains com-

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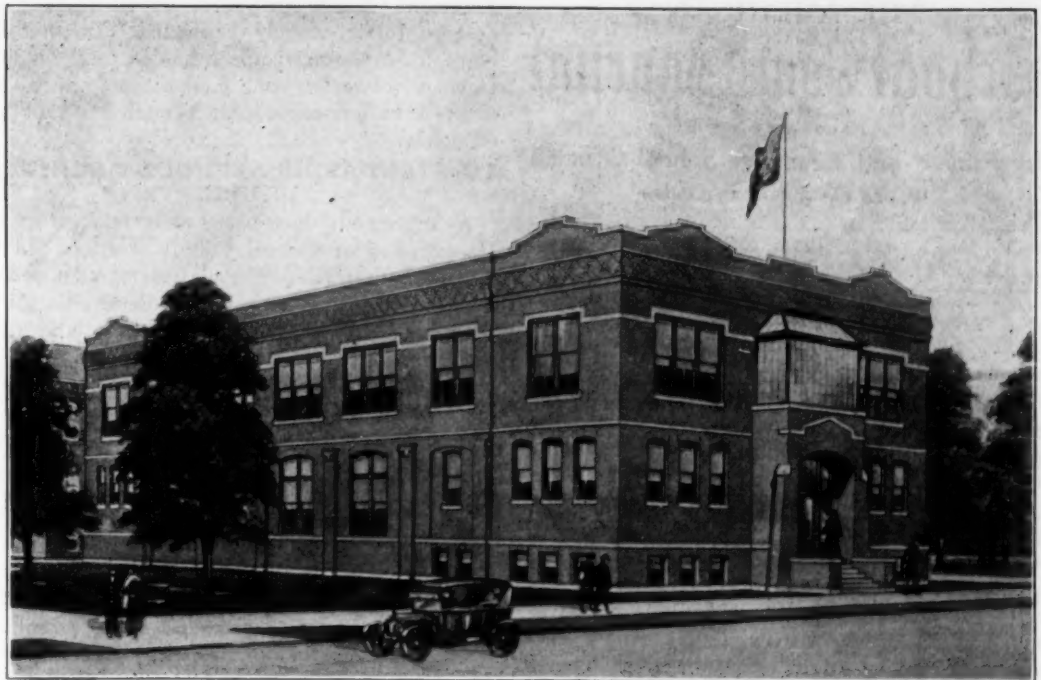


ST. ANTHONY SCHOOL, DAYTON, O.
W. L. Jaekle, Architect, Dayton.

A COMMUNITY SCHOOL BUILDING.

The village of Wheaton is a community of 1,500 inhabitants, the center of a splendid farming section in the extreme western part of the state of Minnesota. The interests of the village are strictly agricultural, and its people have no dreams of industrial and commercial greatness. They have had, however, a vision of what approaches an almost ideal American rural and farming community, and with true American push they have set about to realize this vision in a very practical form.

The village of Wheaton has for many years, enjoyed a community consciousness such as few cities or towns can boast. This consciousness has expressed itself in the establishment, several years ago, of a very efficient and active commercial club and of a county farm bureau organized to promote better agriculture, better business, better homes and better living in the village and in the surrounding farm districts. Both the business men's club and the farm bureau have adopted distinctly constructive programs not only for bettering both the farms and the village, but also for arousing a community spirit and a co-operative spirit. The directors have understood very well that the success of the businessmen of Wheaton depends not only upon their individual efficiency as merchants, but also upon the efficiency and prosperity of the farming community which buys in Wheaton. The up-building of both, and the establishment of mutual interests and mutual helpfulness has been the leading purpose. In line with the efforts of the club and bureau, the school board at Wheaton, the Ladies' Civic League and other local organizations have worked for the mutual uplift and improvement of the village and farming community. During the years 1914 and 1915 the work of the several organizations was finally unified in a project which has given an



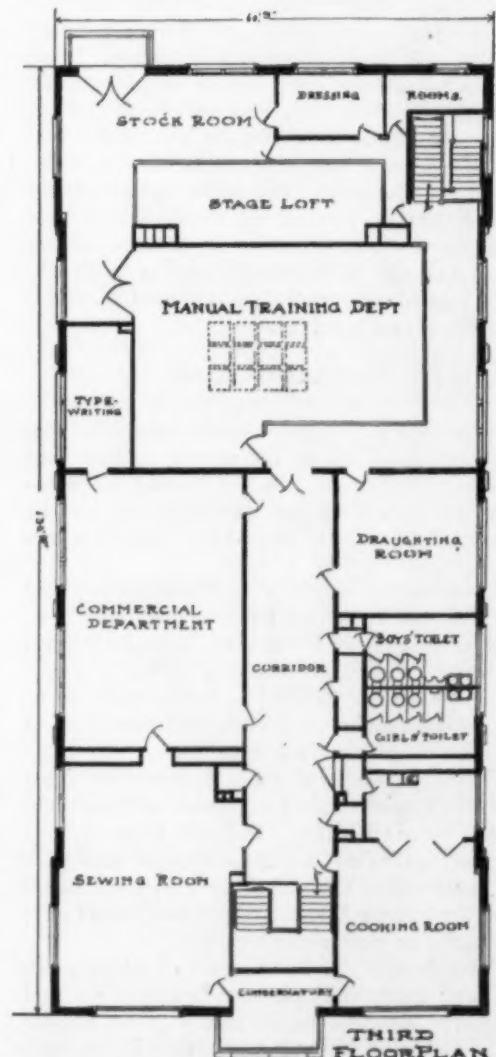
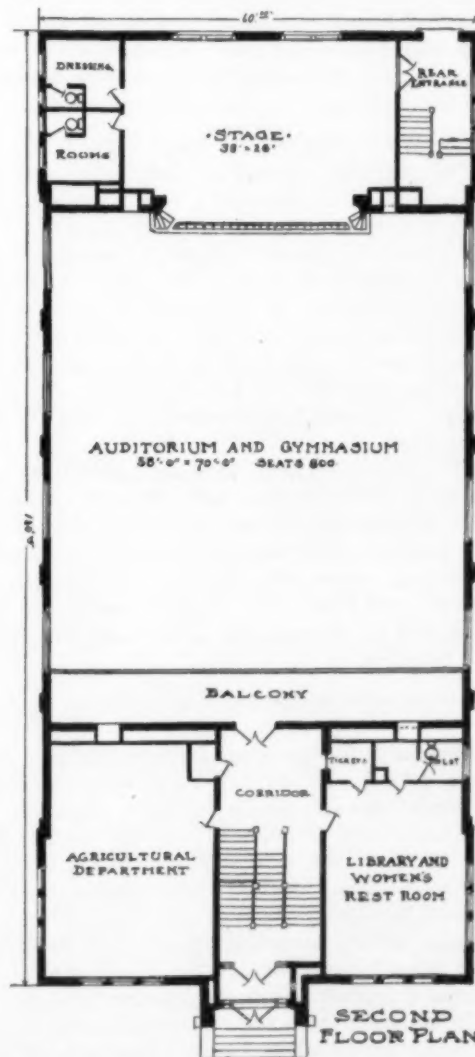
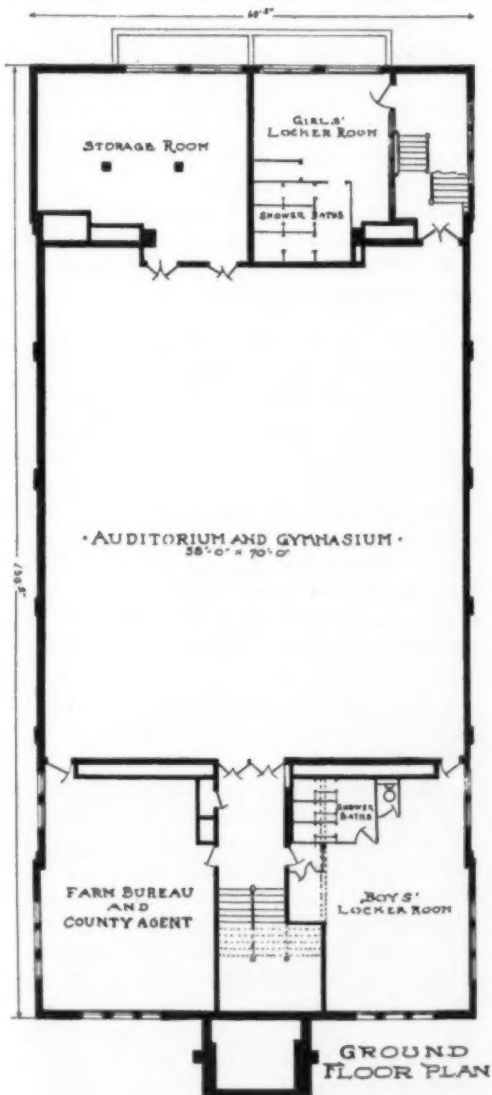
COMMUNITY SCHOOL BUILDING, WHEATON, MINN.
E. T. Broomhall, Architect, Duluth, Minn.

immense impetus to their respective labors and has localized the same in a community center building—The Wheaton Community School-house.

In the fall of 1914 the Wheaton High School had outgrown its quarters, and the members of the board of education discussed at some length, the necessity of providing additional space for the increase in attendance. There was a demand at the same time for the development of the industrial department of the school and for the extension of shop work, household arts, physical

training, agriculture and commercial work. The problem was studied for nearly a year, and the conclusion was finally reached that the most logical solution would be the erection of a separate building which should house each of these departments of the high school and which should, in addition, provide space for a combined auditorium and gymnasium. It was thought desirable also, to provide some space if possible, for the county farm bureau and for a library and women's rest room. The several

(Concluded on Page 64)



FLOOR PLANS OF THE WHEATON COMMUNITY SCHOOL BUILDING.

THE AMERICAN School Board Journal

DEVOTED TO

Legislative and Executive School Officials

WILLIAM C. BRUCE, Editor

EDITORIAL

LEADERSHIP IN CLEVELAND.

The final report of the survey commission, which examined the school affairs of Cleveland during the past two years, has summed up the shortcomings of the school system of the Ohio city by declaring the present situation to be the result of a lack of educational leadership. The summary is, we think, correct and applied not only to Cleveland but to many communities where bad school conditions exist.

The trouble in Cleveland has been largely with the board of education. Whatever laxity and inefficiency the survey has uncovered, and it has found as many praiseworthy things as bad things, has been traced back directly, or otherwise, to the heads of the respective departments and from them to the central administrative and supervisory officers. Ultimately the board is responsible, for it has chosen these executive officers, both professional and lay, and sanctioned their official acts and policies. The real test, in which both the officers and the board have failed, is the attitude which they have assumed toward the surveyors and toward their findings. They have not been big enough apparently to believe that the surveyors are honest in their study and that they should accept with good grace, the unfavorable things which have been brought out.

A good test of any man is his ability to see a mistake and to correct it promptly, and with good grace. The Cleveland officials will win the admiration not only of their own community, but of all American educators if they will make a consistent effort to reform the Cleveland schools in every unfavorable detail which the survey has brought out, and which can be reformed with reasonable effort and due regard for economy. The surveyors as experts, and surveys as a means of school reform, will suffer far more from a demonstration, by actual trial, that the recommendations are unsound and illogical and therefore impossible, rather than abuse and hostility.

CHANGING JOBS.

Superintendents and teachers in new positions remind us of trees which have just been transplanted. Just as the growth and productiveness of trees is arrested during a period after transplanting, so educators apparently stand still for months after they come to a new community.

School board members should keep in mind that the new superintendent whom they welcome in August or September, is undergoing a big struggle to "take root." Practically everyone is a stranger to him; he knows nothing or next to nothing of the history and traditions of the schools, and of his own office. He must learn the people and their temper; he must acquaint himself with the policies and practices of the board; he must find the strong points and the weaknesses in the course of study, in the supervising and teaching corps—he must become acclimated, spiritually, socially and educationally, as well as physically.

If a new man, in this process of adjustment, does not make striking recommendations and wonderful reforms, he is hardly to be blamed by the school board. He is rather to be commended for his prudence and foresight. If his

judgment "misses fire" occasionally, he does not deserve to be sharply criticized. In fact we bespeak for the new superintendent and the new teacher, toleration and moderation, and above all, reservation of judgment upon his and her efficiency.

TO STANDARDIZE SCHOOL ARCHITECTURE.

A movement has been undertaken by the Department of School Administration of the National Education Association to standardize school architecture or rather to determine minimum essentials in the general plan and construction of schoolhouses. The committee is headed by Mr. Frank Irving Cooper of Boston and includes in its membership, Mr. S. A. Challman, school building commissioner for Minnesota; Mr. C. E. Chadsey, superintendent of schools, Detroit; Dr. Louis M. Terman, professor of hygiene at Stanford University, and Dr. Leonard P. Ayres of the Russell Sage Foundation.

The committee will find a wide field of useful investigation. While some essentials of classroom size, stair width, etc., have been fairly well established, we have no data for judging the economy of a building, either for layout or construction. There are no figures to show whether a building is wasteful in corridor space, whether special rooms are too large, whether the fireproofing is reasonably adequate; whether the cost of the heating plant is out of proportion to similar plants; whether the finish and ornamentation are extravagant; whether the exit facilities are fully safe; or whether the sanitation complies with minimum requirements.

While absolute standardization of schoolhouses cannot be hoped for as a result of the committee's efforts, there is much that it should do. Its findings should form the basis not only for practice in individual cities and towns, but should be utilized in outlining state legislation.

The committee deserves the heartiest support of school boards and school architects. Its findings will become common property for the betterment of American schoolhouses, and thereby, for the betterment of American education.

MILITARY TRAINING AND THE N. E. A.

The National Education Association at its recent convention adopted a sensible resolution with respect to military training. In doing so, the association showed a splendid sense of its own function and duty to the nation and the nation's children. It reiterated its own unalterable determination to promote peace and the arts of peace, and it recognized at the same time the possibility of a national necessity for military training. The association said in its resolution:

"While it recognizes that the community or the state may introduce such elements of military training into the schools as may seem wise and prudent, yet it believes such training should be strictly educational in its aim and organization, and that military ends should not be permitted to pervert the educational purposes and practices of the schools."

THE SCHOOLMASTER IN PUBLIC OFFICE.

Certainly the pedagog is demonstrating in these days his ability to hold public office and to render valuable public service.

Whether the republicans or the democrats win in November, a former teacher will occupy the presidential chair during the next four years. Mr. Hughes was at one time, at the beginning of his career, a teacher at Cornell so that Mr. Wilson cannot alone claim ownership of the sobriquet the "schoolmaster president."

In congress there are at present several conspicuous figures whose lifework has been education. John W. Abercrombie of Alabama has

been teacher, state superintendent and president of the State University of Alabama. His eloquent colleague from Louisiana, James B. Aswell, was for many years a teacher and resigned from the state superintendency to go to Washington. Congressman S. D. Fess who has been conspicuous as a republican minority leader was at the time of his election president of Antioch College in Ohio. Congressman Kelley of Michigan held the state superintendency of his state from 1905 to 1907.

Many superintendents will recall the educational treat of the governor's evening at the Detroit Convention of the Department of Superintendence. Governor W. N. Ferris who was the first speaker of the evening, has been, and still is a teacher and his school, Ferris Institute, is one of the successful private schools for adults whose early education has been neglected. Governor M. G. Brumbaugh of Pennsylvania has been an educator all his life. He has taught in a country school and in a college; he organized the Porto Rican school system as the first American supervisor sent to the island after its acquisition from Spain. When elected to the office of chief executive of Pennsylvania, he was superintendent of schools at Philadelphia. Governor Willis of Ohio was a normal school teacher before his election.

At least three of our diplomatic representatives in Europe are former college men. Henry Van Dyke was a professor of English Literature at Princeton from 1900 until his appointment under President Wilson. Our minister to Greece, Garrett Drovers, was for several years president of the University of South Dakota, and more recently, held a professorship in Williams College. Maurice Francis Egan, minister to Denmark was for years a professor of English.

In local politics many schoolmen have, and are, holding office. Prof. C. P. Merriam of the University of Chicago, has been a member of the city council for years and has been a potent factor in cleaning up moral conditions thru the Merriam Commission. Supt. Hugh S. Magill of Springfield, Ill., is a retiring member of the state legislature and a "possibility" for the governorship of the state.

The day has passed when the schoolmaster in public life can be considered less able than the men who have been engaged in business or in a profession.

MEETING CONDITIONS.

One of the remarkable effects of the present war upon European countries has been the activity of scientists and manufacturers in devising new materials to take the place of others which have become scarce and difficult to obtain. The press has recorded the discovery of substitutes for rubber, celluloid, copper and even food products. Never has the old saying, "necessity is the mother of invention," been so true. But more remarkable than the efforts of inventors and manufacturers has been the adaptability of the people of the stricken countries to their straightened economic condition, and to their limited choice of raw materials and finished products.

In a very small way, American schools will be confronted in September with a shortage of materials and equipment of various kinds. In most cases, the difficulty is not the absolute impossibility to obtain standard goods, but rather the high cost which will make buying prohibitive with the funds at hand. A splendid opportunity will here be open to teachers, supervisors and others to test their ability to adapt themselves to conditions, to use less of materials which have risen in cost, and to economize in the management of ordinary activities of classes, shop and workroom. The condition

should suggest the opportunity of making constructive experiments, of trying new ideas and new materials.

The attitude of mind of some teachers who find it impossible to get along without a favorite type of apparatus, should not be tolerated by school administrators. There should rather be a very careful adjustment of efficiency and economy, and a recognition of possibilities and impossibilities.

In this connection it is interesting to note that in one city, the schools have made large economies in writing paper by a larger use of the blackboards. The school authorities have told the teachers that a certain amount of paper only is available and the teachers have adjusted themselves to the condition by working out new methods of blackboard work for the individual pupils. A dozen similar instances might be cited.

The best test of efficient management in school affairs, as in business, is the prompt adaptation of methods to economic conditions.

CARNEGIE ADOPTS TERM INSURANCE AND ANNUITY PLAN.

The Carnegie Foundation for the Advancement of Teaching has announced a change in its system of insurance and annuity for college professors in the United States and Canada. Under the old system, the Foundation granted retirement allowances to aged professors in certain colleges. A college teacher, under the rule, must have served 25 years in a professional position, or thirty years as professor and instructor, or as instructor, before he could make application for a pension. As a result, such teachers were between 55 and 60 years of age before they could obtain protection for themselves or their families.

The new plan proposes a system of term insurance for teachers to the age of 65 or over. This is to be followed by an annuity for life, obtained thru the contributions of teachers and institutions to which the foundation will add one-half or more. The foundation proposes to use its entire income for the maintenance and development of the system, to the end that teachers shall be protected against disability, and their families against destitution. It is assumed that a good rate of interest may be secured on all accumulations.

The new business of insurance and annuities is to be carried on thru a sub-agency controlled by the foundation, which is called the Teachers' Insurance and Annuity Association. It is to be incorporated under the laws of the state of New York with a capital stock owned by the foundation, and a paid up surplus to insure stability. The plan contemplates a pure insurance and annuity business conducted under the scrutiny of the state insurance department. It will offer

only legitimate insurance in terms, to the age of 65 or over, ordinary life policies and paid up life policies after twenty, twenty-five or thirty years.

A second sub-agency is planned to receive the deposits of teachers and accumulations toward annuities. Colleges and teachers who enter into the system will be given some participation in the conduct of the business.

The new system which is the result of two years' study by the foundation's experts, embodies many ideas which are suggestive in formulating state wide pension systems for elementary and high school teachers. It involves the participation of both teacher and institution and provides immediate protection for death or disability, as well as an annuity for old age. It is to be compulsory in the institutions which desire to participate and considers each teacher as an individual, whose earning power regulates the amount of his life insurance. It is worked out on a sound actuarial basis, provided by experience. A common teachers' fund would, in addition, require to be administered by the public authorities and would return to the teachers with interest, such amounts as they have paid into it.

The pension idea is based upon wise principles of public educational policy. Its ultimate purpose is to benefit the people by benefitting the teachers who become old in the service. At present it deserves careful study of administrative details so that every pension system which is undertaken will be safe, equitable and permanent.

MURAL PAINTING IN PUBLIC SCHOOLS.

In a recent issue the American Architect calls attention to the value of mural paintings as a form of decoration for school buildings. It says:

"To serve a patriotic purpose and to encourage a beautiful phase of the painter's art, the Education Committee of the London County Council has approved an offer to provide decorative paintings for the Council schools. The scheme of subjects will be to illustrate life and industry to the British Dominions.

"This method of decoration has been followed in the public schools of a great many cities in this country, particularly in New York. The results have proved so entirely satisfactory, as means of inculcating patriotism and arousing interest in the better forms of art, that as fast as possible each new school will receive some mural painting as a part of its decorative treatment.

"The competitions held by Boards of Education in this country have called forth efforts from some of our best artists and the results now in place in many of the later high schools are material evidence of the possibilities of mural painting, both educational and artistic."

AFTER THE STORM.

Some of the gratifying happenings of the recently ended school year are to be found in the outcome of a number of superintendency troubles. A considerable number of the prominent educators who have had serious differences with their boards of education, and who resigned or failed of re-election, have found new positions, in many cases in larger and more important communities than before.

Supt. J. H. Francis who has been facing the most difficult possible situations in Los Angeles, and whose office had become the football of contending political and social factions, has gone to Columbus, Ohio, where a wonderful opportunity for service awaits him.

Supt. J. A. Whiteford of St. Joseph, Mo., has been promoted to the superintendency at Oklahoma City, where the differences between the members of the board of education have been varied. Supt. Charles W. Bickford of Manchester, N. H., has gone to Lewiston, Me. Supt. G. T. Smith of Peoria, Ill., who held the superintendency at Peoria during the past nine years, has gone to Colorado.

It would be pleasant to record a similarly happy ending of the difficulties of all superintendents. Unfortunately, a considerable number has found no new situations. To some the close of the school year has been the final curtain of a professional tragedy. They have dropped out silently and for all time. For others the coming year will be a difficult one—a struggle in a minor teaching or supervisory position.

To us the professional schoolman who has lost his standing, thru the loss of his position, has always been an object of sympathy. It has been a cause of bitter reflection upon the political and personal motives of some types of school board members who lack entirely a sense of the brotherhood of man.

GEORGIA'S DISGRACE.

The school people of Georgia and almost its entire intelligent citizenship is justly ashamed of the tactics of the legislature in treating the problem of compulsory education. Last year a bill was passed by the state senate which provided that children between the ages of 8 and 14 years be compelled to attend school for at least twelve weeks each year. An amendment in the house now allows the county boards of education discretion in relieving any person from the operation of the provisions of the act for any sufficient cause. No guardian may be compelled to send a child to a school maintained out of any other than the funds belonging to the ward.

The amendment will practically make the law inoperative and while in the language of a newspaper, it will "save the faces" of the legislators, it will not save the children of the state.

A KANSAS RECORD.

The SCHOOL BOARD JOURNAL for July contained a brief news item on school book costs in Kansas under the new system of state publication. The state printer in his statement of costs and economies very wisely limited himself to manufacturing costs so that the work of his office might appear all the more remarkable. We should be interested to see a complete tabulation of the cost of producing the new Kansas books. Such a tabulation would necessarily include the expenses of the junkets taken by the textbook commission, the salaries paid to its members, the costs of the legislative investigations, the overhead charges of the state printery, including such important items as the interest and depreciation on the plant, the cost of maintaining the distributing system, etc. If all these items were added together, the saving would not be greatly to the disadvantage of books bought from regular publishers.



UNCLE SAM'S CHILDREN

McCutcheon in Chicago Tribune

Shall Current Literature Be Taught in the High School?

G. E. Boynton, Head of the History Department, Erasmus Hall High School, New York City

It is an interesting study to watch the development of the high school curriculum—to see studies which were once regarded with indifference, gradually gain the recognition they deserve. It would be interesting, too, if we could ascertain to what extent their increased value is due to the better methods and aids used in presenting them.

History, and English and Science, for example, in recent times have run this race successfully and have been given first rank. No one doubts that their progress is due in no small degree to the methods and devices which pedagogy and pedagogs have suggested or inspired.

Not all suggestions or experiments have been of value by any means, but a strong desire for the best has developed a pedagogical equipment without which the subjects could not hope to hold the rank they now possess.

In history it is the demand of the trained teachers, worked out in the school of experience, which has brought forth better textbooks, wall maps, charts, reference books, etc. It is the response to their demand which has added materially to the power and importance of the subject. The same is true of other studies.

As a result, the live teacher is on the watch for any help which will enable him to make his subject more efficient as a means of training the mind and judgment of the young. He will also be alert to detect and reject any device which experience has shown to be of no value.

The survival of the fittest will be a living principle here as in other phases of life. Some things suggested may at first seem worth while but the test of experience may reveal their worthless character.

At the present time history and English teachers are trying out "Current Literature in the Classroom" as a means of giving their subject a vitality it does not always have.

Some speak in no uncertain tone of the value of the plan, while others are doubtful or are yet to be convinced.

Here, then, is an opportunity for the teacher who loves to find the truth, the investigator who is willing if necessary to add to his burdens temporarily, if perchance he can establish the truth or falsity of this new theory.

I know that among teachers of history who are hoping and working for good results from the use of current topics, there is a feeling that their subject does not yet hold the place it should in the hearts of their pupils; that although examinations may be passed and lessons learned, the subject does not grip the pupil like his science or some other subject which seems to him more real. History seems to many something finished a long time ago and not a real live thing.

When one thinks of the riches our subject has to offer—how it opens the door to the best that the library and the press can give, how it helps us to understand and appreciate the world in which we live, I say when one reflects upon these things, he feels that he is not living up to his opportunities if he cannot make his pupils see and feel the wonders of his subject.

The question many are sincerely asking is, Will it help us to close our textbooks once a week and for at least a part of one recitation focus the attention of the class upon the life about us?

One great object in the study of history is that we may know and appreciate this complex world of ours. Will these pages of the past seem more clear if we throw upon them the light of the present?

Our pedagogical highway is from the known to the unknown. Will the pupils' interest be vitalized if we approach the past by means of the present?

Will some terms of history which seem vague to the average pupil be made clear if we see the same topic developing from day to day in our very midst?

In striving for an answer to these questions, we must not forget that the curriculum is already overcrowded; that our work as it is, often seems superficial, so vast is the amount to be covered. Teachers, too, must not be unnecessarily burdened. All agree that the demands upon them made by the city and the state are increasing and any addition must prove its worth before its adoption.

It is a question, too, if any serious discussion of the present should not be postponed until the student has acquired a body of historical facts sufficient to help him understand the more complex life of today.

No one questions the value of illustrating the past by some references to the present, familiar to all, but to take time from the regular text and give to current topics of the day, is a departure open to doubt until its worth is made clear.

Some of our students in the library and debating societies discuss these modern topics with interest and profit. Is it worth while that the great body of students shall have this new interest or shall they wait until later in life?

We must not forget that with many this would mean no opportunity as they will not finish their course.

The problem is by no means easy. It is only by painstaking investigation that we shall find the solution. The laboratory is this busy, throbbing world of ours. The expense will be little

beyond our time. As the students attempt to analyze and explain this new material, it will be interesting to see if, as some claim, they get a new vision of history, if the interest they develop in these discussions is carried over into the pages of history which represent the past. If I am teaching Oriental history, say, The Tigris Euphrates Valley, will the class show more life if we discuss first the present Russian campaign, the capture of Kut-el-Amara, etc.? If I am teaching the social reforms of Ancient History, will they seem more real if we have been talking about the prison reforms of Osborne, Widow's pensions, Compensation Act, Child Labor Law—recent current topics?

If we are working in our laboratory with some constitutional convention like that at Saratoga last summer, will it make the meaning of a constitution more clear?

Will the explanations in our civics be better understood if we watch the growth and work of the convention to nominate the President, if we read the results of the election comparing the popular vote with the electoral vote?

Will Diplomacy or Foreign Relations take on a new meaning if we watch together thru the weekly press the unfolding of our relations with other nations as we have done for the past year with Germany?

Then, too, it will be fair to ask ourselves if these discussions seem to react upon the students in the nature of giving them higher ideals. Does their sense of justice grow more keen? Is "graft" a thing they grow to condemn?

This is surely a field of investigation for us. It is definite and full of promise. We must do our part and tabulate the results. Any discovery which would make teachers more efficient in their efforts to make good citizens would certainly be well worth while.

Conducting School Motion Picture Circuits

Ernest A. Dench

In the motion picture industry new producers spring up like mushrooms, and the ones that survive are those backed up by a scientific distributing plan. Exactly the same problem confronts educational bodies in adopting motion picture education; they must worship system.

For many reasons, a circuit of schools is highly desirable. In the first place, it is more practical to purchase the films outright from a regular exchange than to hire the same on every occasion. It is also more reliable, for exchanges are prone to substitute one film for another.

"We need municipal circulating libraries of motion pictures," recently said John Collier, Secretary of the National Board of Censorship. "The city should own the films and rent them out to public schools, libraries, settlements and recreating centers."

"When any school tries to get certain pictures they find them 'on the road' probably in some distant part of the country, in such a circulation that it is impossible ever again to get any particular picture, after it has once started on its circuit."

Obviously, therefore, establishing a school film exchange is the best solution of the problem and in this connection the University of Wisconsin is the pioneer. The Department of Visual Education set itself up in business by purchasing 130 reels of films and 18,000 lantern slides. Each of the 285 schools co-operating with the Department receives a set of 85 slides

and the 78 schools possessing motion picture projectors receive a reel of film in addition.

The slides and films are changed weekly, so that there is comfortable time to prepare the children for the same. When used, the school sends the parcel on to its neighbor, the only cost being about thirty cents for express. The State is arranged in territories so as to facilitate distribution of the films.

How such a system may be inaugurated is best gleaned from the plan followed by the California State Board of Education. The State Board collected all the suitable films from available sources and cataloged them in order that the schools could select any particular subject they desired. This service was also extended to apparatus needed in the presentation of such shows.

The experiments carried out by the London County Council are not without their practical value: "An educational series of films should be exhibited in the halls of six polytechnics. Each series would last 45 to 50 minutes, and would be given four times during the day, twice in the morning and twice in the afternoon, between the hours of 10 a. m. and 12 m. and 2 p. m. and 4 p. m. respectively. By limiting each performance to about fifty minutes, the children could be changed without difficulty. It would be possible for about a thousand children to be present at each performance. The apparatus would be kept in each polytechnic for the first five days of the week, and be moved on to the next polytechnic on Saturday, ready for use

(Concluded on Page 34)



The Victor XXV in use in the South High School, Minneapolis, Minn.

THE Victor and Victor Records are now a part of the regular equipment in the schools of over 3500 cities and towns in the United States.

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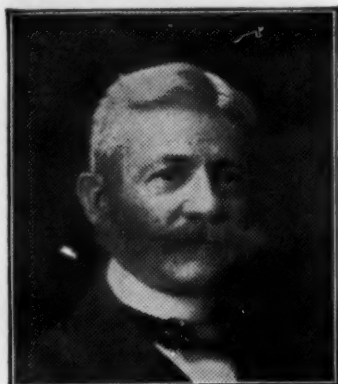


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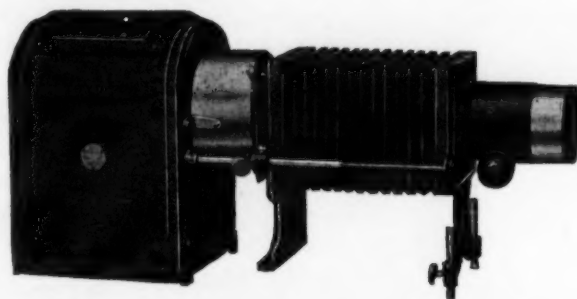
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the quickest and surest way to get the pupil's mind back to the schoolroom, after a long vacation, and to cause the students to concentrate on their studies, is by using a stereopticon.

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150,000 slides for sale or rent.

McINTOSH STEREOPTICON COMPANY

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(Concluded from Page 32)

on the following Monday. We are considering the advisability of arranging for a large number of children to see the films on one occasion only, or for a smaller number of children to see them on more than one occasion.

"A large number of films will be submitted for selection, and the same program will be used thruout the entire period. We have made arrangements for the list of films to be submitted to us for approval before the experiment is begun. Instruction will be given by teachers in the schools on the subject of the various items both before and after the performance. A lecturer at the exhibition will not be necessary, as with the instructions given by the teachers and the explanatory notes accompanying the films, the children will be able to follow without difficulty."

But the difficulties increase when a school decides to give motion picture shows on its own account. This fact debarred the Board of Education of Pittsburgh, Pa., from carrying out its film plans, as the city fire and insurance regulations were too expensive to be complied with.

No other course is open than to set apart for motion picture lessons on the ground floor a special room, which should be equipped with the regulation tip-up seats, screen, a fireproof operating booth and several exits.

The most costly item of equipment is the projection machine and \$250 seems a lot of money to spend since the machine will only be used about once weekly. The Iowa State College at Ames has solved this difficulty by forming a circuit of schools and by defraying freight charges. Any high school thus unequipped may hire a projection machine.

Last, but not least, is acquiring expert assistance, for motion picture exhibiting is not with-

out its technicalities. The teacher could not operate the machine because he would have his hands full in lecturing to the film and looking after his pupils.

A regular operator could, of course, be hired, but as his services would only be needed on one day weekly, the expense would be out of all pro-

Opening and Maintaining a Practical Arts Department Without Increasing the Tax Rate

F. D. Mabrey, Bennington, Vt.

In many small towns, there are school officials who are seeking unsuccessfully to introduce a course in Manual Arts without so increasing the cost of the schools as to affect the tax rate. That it can be done is shown in the case of Bennington, Vt., a village of ten thousand people. A short history of the work done there during the past three years may be a source of inspiration for others in a like situation.

In the fall of 1912, the Bennington high school curriculum was typical of the narrow course of study prevalent in New England. There were three distinctively high school courses: College preparatory, of which Latin was the backbone; the English course which was the same as the college preparatory, except that Latin was not required, and a commercial course which was the one immediately practical course, and as a consequence, the only crowded one. There was also a course in teacher-training for rural schools, under state control, open to fourth-year students. The registration was 160, an increase of only 125 since 1876, when the commercial and English courses were first instituted. As a result of frequent faculty meetings, during the fall term of 1912, the teacher of Latin offered to teach a class in sewing provided two sewing machines were rented. She decided to make

portion to the services rendered. If, however, he could work a circuit of schools his salary could be shared.

The Iowa State College, for instance, has on its staff a Consulting Engineer, who renders assistance to schools in need of motion picture advice.

simple wash dresses and to place them on exhibition in June in order to arouse public sentiment in favor of the work. A policy of exhibiting at every opportunity had been adopted to create and sustain public interest in high school activities. It was decided to ask the board of school trustees to establish a course and to appropriate funds for the purpose. Instead of ordering the rental of machines the trustees purchased two Singer machines.

In spite of our fear that perhaps some parents would not permit their girls to take such work in place of Latin and algebra, 21 girls registered for the sewing class. The work progressed rapidly and with increasing interest upon the part of the townspeople and pupils. In June, when 21 dresses costing not over \$1.50 each, were placed upon exhibition, the seal of approval was put upon the line of work by the crowds in attendance. As a climax, a local manufacturer offered to buy one of the dresses to serve as a pattern in his mill, but the owner refused to part with her first fruits. The compliment, however, remained.

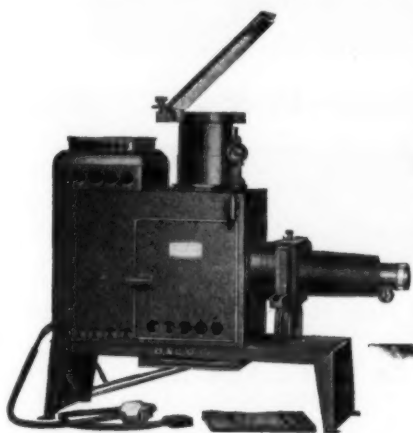
The course was a good introduction and opened the way for enlarging the work. In June of that year, the general utility teacher resigned and in her place a person trained in

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domestic arts was engaged. It was believed that withdrawals from other courses would more than make up for the classes formerly taught by such a utility teacher. As a matter of fact, there were withdrawals from other courses and the greatest decrease was in the commercial course. Some classes were rather crowded but the extra burden was borne cheerfully by the teachers. The domestic science teacher did not increase the salary estimate but upon the contrary decreased the total. At that time, the entrance salary in the high school was \$500. As the state of Vermont refunds \$200 a year to all towns which pay at least \$600 a year for teachers in either domestic arts or manual training, advantage was taken of this provision and six hundred dollars, a meagerly sum, perhaps, was offered and a graduate of Teachers College was secured. Of course, she had no experience, but she had, what was of greater importance, vision and great enthusiasm. Her one direction from the school authorities was that all work must be practical, that everything in the course must be of such a nature that it could be repeated in the average home of the town. She planned an admirable course, and it was accepted by the State Board without alteration.

Under this course, the first year of the work was given to sewing; the second year to sewing and domestic science; the third year to cooking and chemistry of foods and the fourth year to advanced sewing and millinery. Fortunately, the work was well under way when, in January, the teacher accepted a call to a better position, as was to be expected.

Her plan has developed well during the past two years, altho her successor has been of entirely different caliber, lacking enthusiasm, vision and love for her work. In spite of this fact the work has progressed until now the general course, general in every sense with its broad system of electives, is the most popular of the five courses offered.

The additional courses attracted increased

registration. The opening of school following the establishment of the new work found the school crowded to its capacity of 180 pupils. The need for a new building became acute and the demand for a manual training course for boys imperative. Both were authorized during the year and a new building was started in the spring.

The opening of school, in September, 1914, found us with an abundance of two hundred pupils, with the building unfinished, and with a new course in manual training organized. The salary of the teacher was \$900, of which the state refunded \$200. This amount was not, strictly speaking, an additional cost due entirely to the new course, but was a necessary

expense, as an extra teacher was imperative to take care of the increased numbers.

The work of the first few months was a matter of much thought. The earliest job that presented itself was due to the fact that, as the training was to be offered in the grades as well as in the high school, a shop was necessary in both buildings. It was decided to utilize the basement chemical laboratory. For temporary use the chemical table was lowered and a heavy top with fourteen vises placed on it. The cost was \$26.

When this work was completed, the class commenced to make benches for the shop of the new building. Six were finished at a cost of \$37.68, and when the new building was opened in November, the shop had a good equipment. A combination woodworking machine, with a five horsepower motor, powerful enough to run the machine and six lathes, was purchased and set up and the class was ready for the next thing.

During the past three years, the plan of grasping every opportunity to be of service to the school has worked admirably in the manual training department. While the plan may be open to the criticism that it is poor policy educationally and only applicable in a new building, it is our experience that a shop class will always find work to do. There are many improvements and repairs which are not absolutely necessary, perhaps, and for that reason are not adopted. These can be done by pupils, who are not paid for their labor. Thru such a class, the comfort and convenience of any building, the older the better for the purpose, will be improved and consequently, the standard of the school will be raised at little cost.

The next problem for our class was ready at hand in the form of a contract for cooking tables. Thru an error upon the bidder's part, the firm to whom had been awarded a contract for two tables, canceled the order. The teacher of manual training offered to undertake the work and one bench was finished and completed



LOUIS P. BENEZET,

Superintendent of Schools-elect, Evansville, Ind.

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by a class of fourteen students in seven weeks at a total cost of \$67. The other was finished by June, in a leisurely manner. The pupils now made useful articles of furniture for their own homes. At the close of school in June, a number of articles of furniture had been finished and were ready for exhibition. An exhibit was made in a large show window where it attracted a great deal of attention and where it gave the class considerable advertising.

September, 1915, found both courses well established and accepted by the public as a good thing. The girls' course has proven more popular than the boys', as is perhaps natural, but the relative proportion of boys has increased and the increase has been almost entirely in the shop course. Additional equipment was necessary in both courses and two additional sewing machines were purchased at a cost of \$75 and set up in the workshop. Everything was ready for the opening of school, with 240 pupils.

The contract for chemistry tables for a new laboratory was given to the manual training class. One was completed and in use by December. It cost, complete, \$150. Work was about to be started upon the second table when, in January, fire upset the work of the school and forced it to move back into the former quarters. The class has since filled a state order for slide boxes and several minor pieces for the school. The boys do all the repair work that comes within their ability and in this way decrease the cost of maintenance.

The impression that our work is strictly utilitarian is not correct. Our work is theoretical in part. From its inception, texts have been used in all the work, for we believe that the boy must know the fundamental tool processes and the general theory of carpentry, cabinetwork and wood turning so that the practical side is not a mere matter of imitation.

The break in the continuity of our progress was a very good time to take account of stock and to see if the establishment of the work along

these lines laid an increased burden on the taxpayer. In 1911, the year before the course was opened, the tax rate was seventy cents per thousand. In 1912, it was ninety cents, but this was due to the \$100,000 outlay upon the new building and not in any way to the new work. During the past year it has been eighty cents, which carries several large additional items. During the past ten years the pay of all teachers in the entire system has been raised by at least two months' salary; the registration of the high school has increased fifty per cent, necessitating the employment of two additional teachers, one of whom is the manual training specialist; a

The Legal Foundation of the Buffalo School System

(Continued from Page 19)

largely to the able superintendents of schools which the city has secured. Particular credit is due the strong personality and courageous devotion of the present superintendent, who for five consecutive terms of four years each was elected to the office of superintendent by the voters of the city, and later was appointed to the same office by the city council. Indeed, the late Andrew S. Draper, when he was the head of the New York State Education Department, stated that the saving factor in the Buffalo school situation was the character of the man whom the people had chosen as superintendent.

The legal foundation upon which the school system was administered from 1891 to 1916 was universally recognized as incapable of furthering the best interests of the schools. In fact, even under earlier laws of similar character the vital weakness—municipal control—had been pointed out. As early as 1872, Superintendent Larned struck the keynote of the situation when he stated, "I know of no other important city in the country in which the government of the schools is not separated from the general organization of municipal government and committed to a board of education."

new high school building has been erected and the interest charges have been carried; a night school of 150 pupils has been in operation for two years and several major repairs have been put in.

We do not claim that the work has cost us no more but it has been from the usual appropriations and not from new ones of greater magnitude. There has been no retrenchment of the work of any of the schools but upon the contrary, the work has been greatly enriched and we feel that the schools are now meeting in part, the demand of the people for the use of common sense in education.

When, with the framing of the proposed Commission Charter, the opportunity arose for Buffalo to construct the legal foundation for a form of school administration based upon the experience of other cities and comparable in its efficiency to the efficiency of the commission form of municipal government, the past educational history of the city was ignored and school provisions were drawn up and adopted as a part of the new charter leaving the schools substantially where they were under the antiquated Charter of 1891.

This is the latest in a long series of legislative acts which have led the highest educational authority of the state to write, "From the enactment of the law of 1837 relating to the schools of Buffalo to the enactment of the charter for that city in 1914, the tendency has been to depart farther and farther from the established practice of the State and the country at large, and to submerge the school system of that city deeper and deeper into municipal and political control until the department charged with the supervision of public education has become a powerless and ineffective school organization."

That the writer of the above quotation has not

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overstated the case may be surmised from the following features of the present legal organization of the school system of Buffalo.

The board of education created by the charter is assigned no specific duties. The charter merely states that "Under the control of the council, they shall have charge of the public schools, their property, expenditures and affairs." Moreover, the board, which is appointed by the council on nomination by the mayor, may consist of any number, not less than five, which the council may determine. The council may increase or diminish the number of members at any time, above the minimum of five members. Members of the board are appointed to serve during the pleasure of the council and are subject to dismissal by the council at any time. Such dismissal is not contingent upon neglect of duty, inefficiency or other good cause.

The superintendent of education, under the commission charter, will be appointed by the city council, on nomination by the mayor, to serve during the pleasure of the council. The board of education has no power with reference to the selection or dismissal of its own executive officer. According to Section 290 of the charter the superintendent will have "the immediate supervision of the schools, the hiring and discharge after a hearing of teachers in accordance with the provisions of this charter, or the rules adopted by the board of education, and subject to the general ordinances and regulations adopted by the council, and shall have the powers now possessed by the superintendent of education, not inconsistent herewith." Not a simple definition of the superintendent's duties, even for a school official to interpret!

The city council, in addition to the powers already mentioned, determines the courses of study or the manner in which they shall be established, will fix the manner of making eligible lists of teachers, will determine the length of teachers' contracts and the amount of their salaries, and will have full power to fix school

appropriations (within statutory limits for sites, construction and extensive repairs).

Altho voters have the right of referendum on ordinances and resolutions passed by the city council, this gives doubtful protection, for any ordinance or resolution deemed by the city council to be "immediately necessary for the preservation of the public peace, health or safety, or for the conduct or administration of any office, bureau, board, commission or department of the city and which contains a statement of its immediate necessity," and approved by four-fifths of the members of the council is not subject to the referendum.

Furthermore, the Department of Public Instruction is a subordinate department of the Department of Public Affairs, and may be shifted at will by the city council to any other

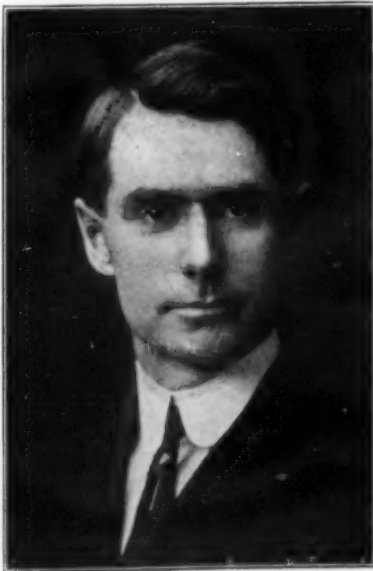
of the five city departments. The superintendent of the Department of Public Affairs (or the superintendent of any other department under which the schools might be placed) is granted large but undefined powers over school affairs.

As school officials have pointed out, it will be difficult for the public to fix responsibility under the new system, for the superintendent is appointed by the council and is responsible both to it and to the board of education; the board of education exercises any powers which it may have subject to the ordinances and regulations of the city council; the superintendent of the Department of Public Affairs, who also has charge of poor relief, has general supervision (and undefined powers) of unknown extent; and finally, all real power in school matters rests with the city council.

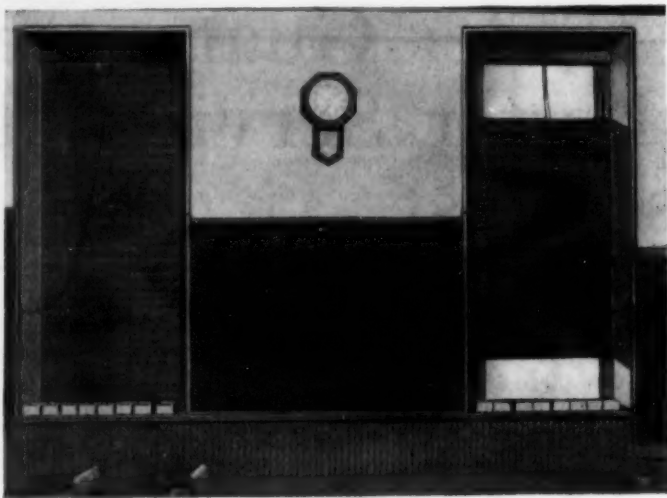
Moreover, the mayor, the council, and the councilman who is at the head of the department which includes the schools are given the same control of the schools which the mayor and common council exerted under the Charter of 1891. Both the professional and the business management of the schools are really continued in the hands of the municipal rather than of the school officers.

That the city council is given authority to enact ordinances transferring much of the detail relative to schools to the board of education, does not nullify the fundamental defects in the legal organization of the school system. So long as council and school board are in full harmony, and so long as the school board can bring sufficient pressure to bear on the council to secure funds, school officers and other essentials the present legal organization may be sufficient for a smoothly working administration. But until both authority and responsibility are lodged in the board of education there can be no guarantee of a stable and efficient administration of the public school system of Buffalo.

To remedy the situation insofar as is possible under the ill-considered educational provisions



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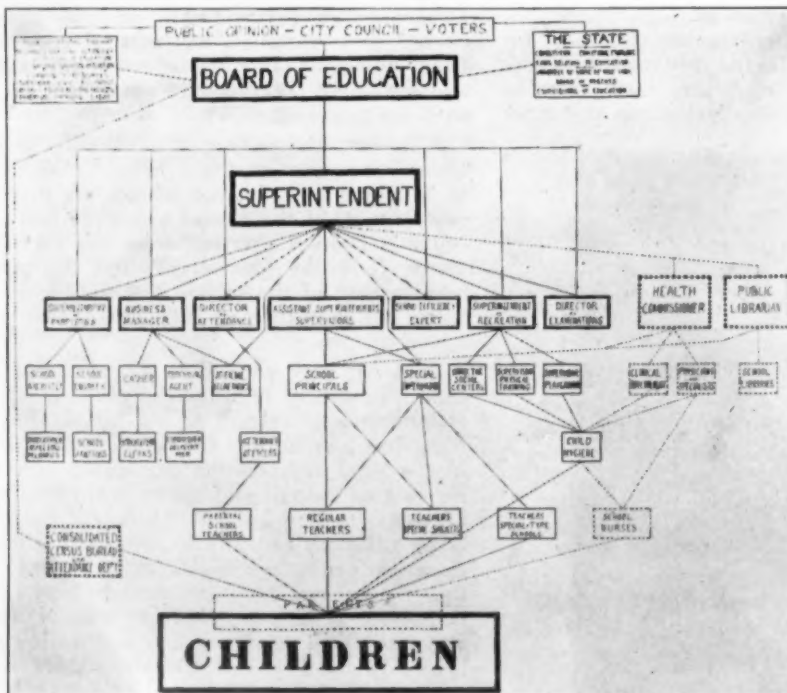
of the Commission Charter, the city council has adopted ordinances granting the board of education considerable power, relating particularly to the selection of school sites, the approval of plans for school buildings, the appointment and removal of teachers and other employees, the selection of textbooks and the determination of other matters relating to the management of the schools.

Whether or not these ordinances may be judged good or bad according to prevailing

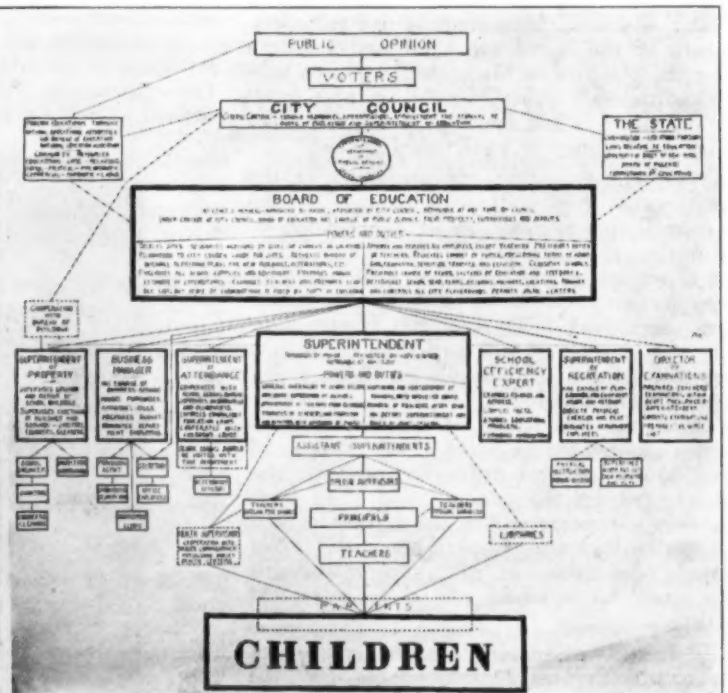
standards of educational administration, is of no particular importance to the schools of Buffalo. For they may be changed tomorrow. The real significance of the ordinances is, that they have been created by a municipal body which by virtue of its office is susceptible to political influences, and which has the power to rescind the ordinances or to amend them at any time, subject to a referendum of doubtful efficacy. Furthermore, the authority granted the board of education by these ordinances is significantly

restricted by Section 28, which reads, "The exercise of the powers conferred and the discharge of the duties imposed by this Chapter upon the Board (of Education) shall be under the general supervision of the Superintendent of the Department of Public Affairs." Who is to define the character and to determine the limit of this "general supervision"?

What such a legal foundation for the future school system of Buffalo may mean, is vividly suggested in the recent survey of the Buffalo



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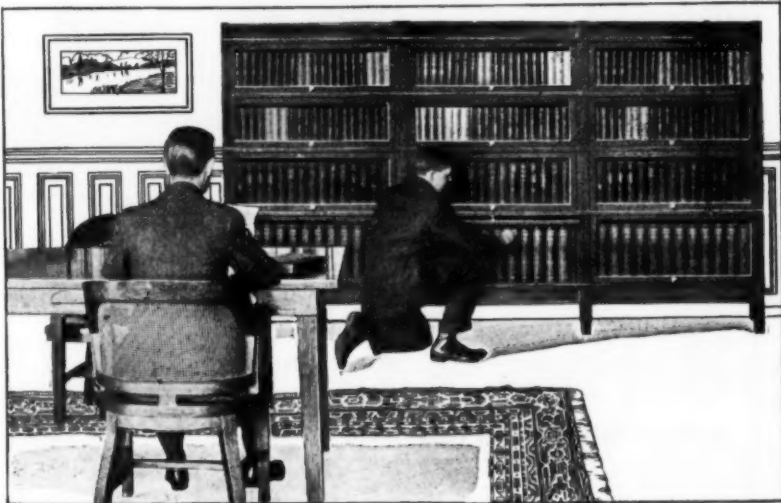
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school system. The report states, "The ineffectiveness of the supervision of the schools, the inefficiency in the teaching force, the utter lack of respect for superior authority which permeates the whole system, the waste of pupils' time and of taxpayers' funds, the absence of good business methods and procedure, and the failure to obtain from the public school system the greatest service which that system is capable of rendering the city, all of which will be clearly shown in the succeeding chapters of this report, are directly traceable to the type of organization under which the school system of Buffalo has been controlled, operated and managed for a half century." Whether the above picture is too highly colored or not, it is well agreed that the legal organization of the schools in past years has reacted harmfully on the schools. And it is plain, too, that the same evils which have hampered the development of the public schools under former legal provisions are inherent in the school system established by the Commission Charter.

One remedy alone remains, and that is, the complete separation of the schools from municipal activities.

This fact is well-recognized by educators in Buffalo and elsewhere. The State Education Department of New York has been working for several years in co-operation with citizens of the city, to bring about a change in the method of administering the school affairs of Buffalo.

In February, 1914, Assistant Commissioner Finegan, of the State Education Department, acting as legal adviser in matters of school law, wrote to the Superintendent of Education in Buffalo, calling his attention to the insufficient powers vested in the board of education by the Commission Charter, which had just been introduced into the Legislature.

Altho it was too late to secure amendments before the passage of the Charter, citizens interested in the schools agreed, in conference, to the submission of a suitable amendment in the

next legislature, to remedy the Charter's defective educational provisions. This agreement included a statement that the Commission Charter should be modified to give the board of education broad powers, "sufficient to operate, supervise, maintain and control the school system of the city; to appoint the superintendent of schools; and, upon the recommendation of such superintendent, to appoint teachers and other necessary experts and employes of the school system." This agreement, published in the press, was signed by the mayor, the chairman of the aldermanic school committee, the superintendent of schools, the dean of the law department of the University of Buffalo, representatives of the Public School League and other prominent men and women.

Bills embodying the principles expressed in the above agreement have been introduced in the Legislature of New York in 1915 and again in 1916, but have been withdrawn in the face of determined opposition from those who feared that home rule in school affairs, might be impaired by their passage.

The main purpose of these bills, so far as they applied to Buffalo, was to separate the schools from municipal affairs. They provided for a board of education with broad powers, of fixed membership and a definite term of office. They left financial control of the schools in the hands of the city council, with the exception of teachers' salaries. Teachers were to be protected by permanent contract. The superintendent was to be appointed by the board instead of the council.

In short, it was proposed to make the school organization of Buffalo modern, simple and efficient, essentially like the school systems in operation in most of the large cities thruout the country.

On the other hand, it is evident that the school system provided by the Commission Charter is little or no advance over earlier methods of administering school affairs in Buffalo, is

complicated, is contrary to the experience of other cities, and in many respects is without a parallel among the school systems of the country.

Altho the proposed legislation has been severely condemned by many, it has had the active support of a large number of well-informed citizens. Doubtless none realize more keenly than the members of the supervisory staff of the schools the importance of legislation along the lines proposed. Many members of the Schoolmasters' Association and other teachers' organizations, the Educational Interests Committee of the Chamber of Commerce, and numerous business and professional men have actively approved such legislation. The Public Education Association has taken a prominent place in this reorganization movement.

But most significant of all is a steadily increasing undercurrent of sentiment, even among those most bitterly opposing the proposed bills, that the present legal foundation of the Buffalo public schools must be changed. To establish the schools of Buffalo on a legal basis sufficiently broad to compare favorably with the standards prevailing in other cities would seem chiefly now a problem of removing prejudices and misunderstandings regarding the scope and purpose of the proposed legislation, and of compromising on non-essentials in order to secure united effort in behalf of the main issues involved.

Dallas, Tex. The census report of the Dallas County schools gives a total of 41,978 children. Based on a \$7 per capita cost, the county will receive \$293,846 from the state funds.

Oklahoma City, Okla. The cost of operating the public schools will be \$382,622 for the ensuing year. Under the five-mill levy, only \$350,000 may be received while the total expenses are estimated at \$414,000. The school system is in need of a new high school for girls and additions to two other buildings.

Norfolk, Va. The board has readopted the policy of permitting school janitors to hire and pay their own help.



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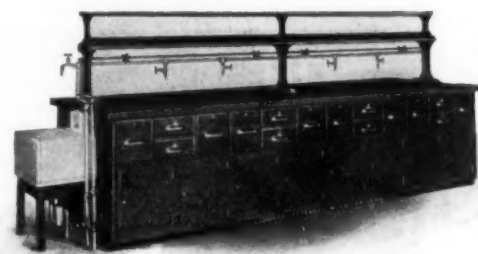
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Town School Administration in Massachusetts

An Instructive Discussion of the Relations of School Boards to Superintendents

A recent bulletin of the Massachusetts State Board of Education discusses extensively, the administrative methods in the rural towns of Massachusetts. The study which was made by Mr. F. G. Wadsworth, Agent for the State Board, notes a consistent growth in the effectiveness of school administration promoted by insistence on business management of public affairs and by the influence of men of sound business training and experience, who are serving on school boards. The greatest fault from which the Massachusetts school committees suffer is the lack of centralized authority which, according to Mr. Wadsworth's findings, has resulted in misunderstandings and conflicts among the administration officials.

The lack of centralization in authority results largely in methods which scatter responsibility and produces a looseness in the conduct of school affairs that is conducive of anything but economy and efficiency. Mr. Wadsworth describes three typical towns as follows:

Town A.—The school committee meets once a month. The superintendent of schools attends these meetings on rare occasions, and then only by special invitation of the committee. The school committee—

1. Prepares an annual budget.
2. Makes provisions for repairs to school property.
3. Selects and purchases textbooks, supplies, equipment and apparatus.
4. Employs teachers, assigns them to schools, and determines the salary schedule.
5. Decides special cases of discipline without reference to the superintendent of schools.

Individual members without special authority perform executive duties, i. e., order changes in courses of study, direct teachers on methods of instruction, and decide cases of discipline.

The superintendent of schools is, in effect, merely a clerk for the school committee. He visits schools, delivers textbooks and supplies to teachers, issues employment certificates, and answers general correspondence. Occasionally

the school committee asks the superintendent to select teachers to fill vacancies, but otherwise teachers recommended by him are seldom elected.

Town B.—The school committee has no regular dates for meeting. Its meetings rarely exceed two each year. All school business is transacted by conference between the superintendent of schools and individual members of the committee, by telephone, at home, on the street, or wherever opportunity offers. The school committee wishes to be relieved as far as possible of consideration of problems of school administration. The committee is interested chiefly in fixing the amount of the annual budget. The superintendent—

1. Submits estimates of the financial needs of the schools, which are used as a basis for the annual budget.
2. Acts as secretary of the school committee and keeps all school records and accounts; receives and approves all bills for purchases; sends out notifications to school committee members of meetings and propositions to be considered at the meetings; and keeps records of meetings and votes of the school committee.
3. Supervises repairs and improvements to school property within the appropriations for such purposes.
4. Appoints and assigns all teachers, with the approval of the school committee.
5. Selects and purchases textbooks, supplies, equipment, and apparatus within the appropriations for such purposes.
6. Decides special cases of discipline without reference to the school committee.
7. Visits schools and gives instructions to teachers without interference by members of the committee.
8. Prepares courses of study and directs the administration of the same.
9. Attends school committee meetings when they are held, and has a voice in the discussion of all subjects considered.

Town C.—The school committee holds meet-

ings at the call of the chairman. These meetings are held at irregular intervals. The superintendent is generally present and has a voice in the discussions. The committee co-operates with the superintendent in some measures, while in others it acts without reference to him, as, for example—

1. In making the annual budget the school committee consults the superintendent about many items.
2. A member of the school committee is delegated to keep the books of the school department.
3. Supervision of repairs to school property is delegated to individual members of the school committee, each member being in charge of certain buildings in the district in which he lives.
4. Textbooks and supplies are purchased by a member of the school committee. The superintendent is required to make requisition for books he desires.
5. Teachers are employed by the committee without consulting the superintendent of schools.
6. In special cases of discipline the school committee often consults with the superintendent of schools, but individual members of the school committee at times decide special cases of discipline without reference to the superintendent or without consulting the teacher.
7. The school committee sometimes passes votes approving certain methods of instruction, even tho the methods do not have the superintendent's approval.

In commenting on the procedure in the administration of the schools of the three towns A, B and C. Mr. Wadsworth writes:

It appears that in Town A the school committee exercises executive as well as legislative powers and duties, the superintendent being to all practical purposes disregarded.

In Town B, on the contrary, the school committee intrusts all duties and powers to the superintendent of schools, and neglects its own responsibilities. Conditions in Town B are as unsatisfactory as in Town A. These are, of course, extreme cases in administrative procedure. The school committee of Town A administers the schools without making right use of the superintendent's office, and the school com-

(Continued on Page 44)



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Schenley High School.....	Pittsburgh, Pa.
High School.....	Shamokin, Pa.
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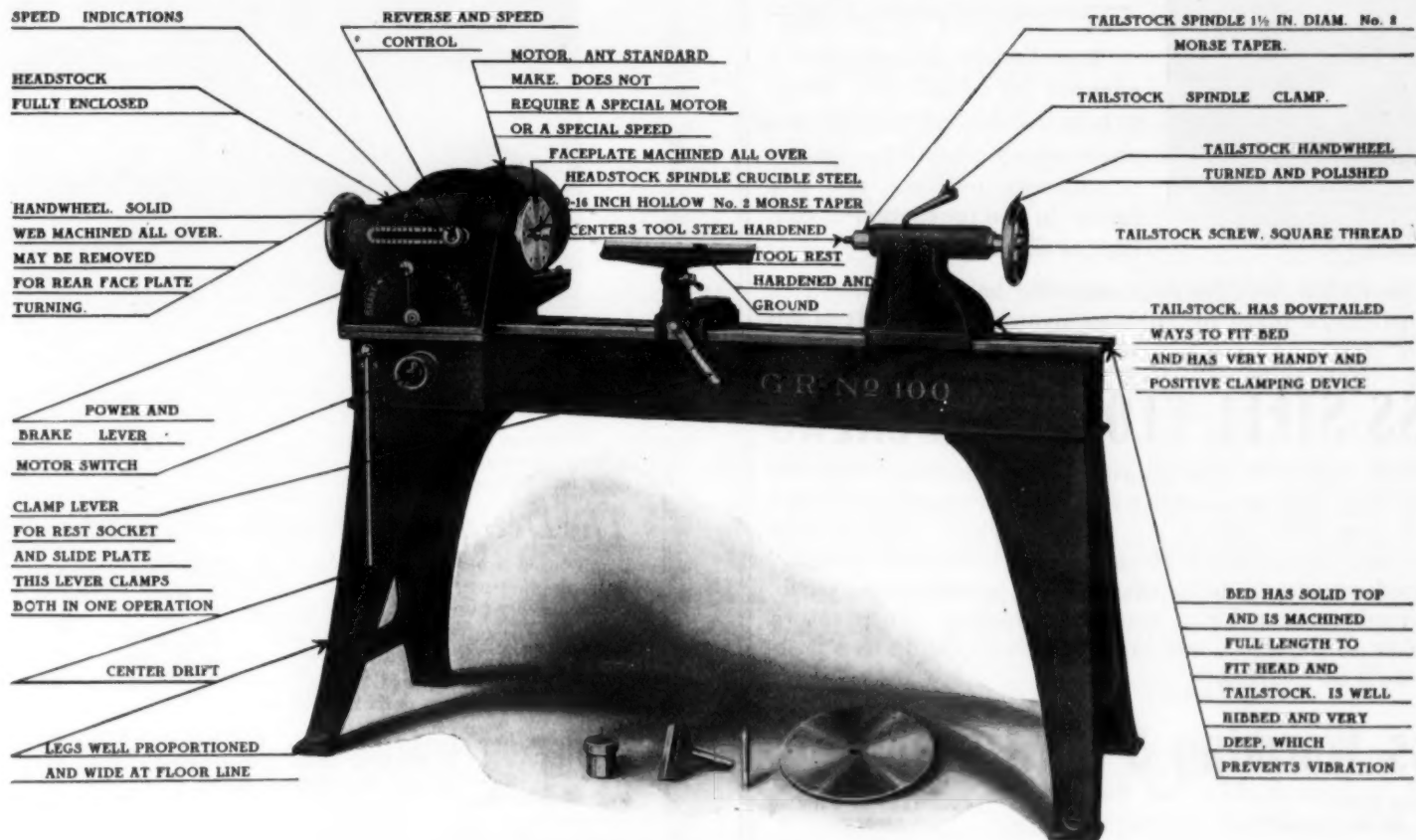
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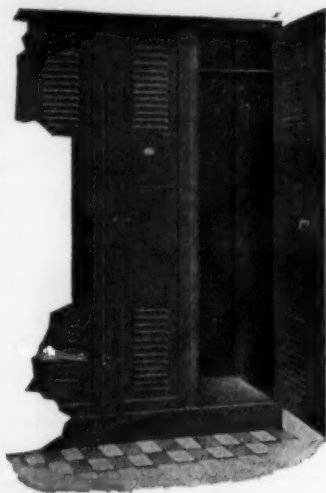
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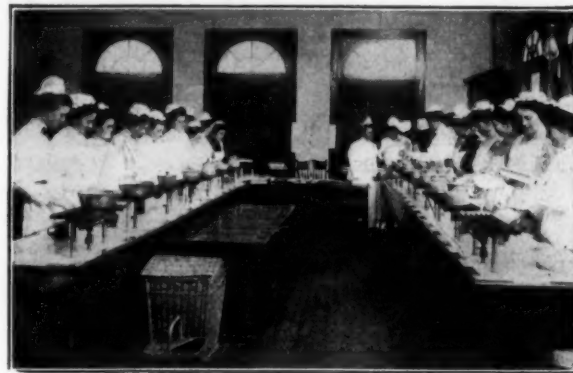
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(Continued from Page 40)

mittee of Town B places administrative powers and duties upon the superintendent and does not recognize its own responsibility.

Town C illustrates a not uncommon condition, where the functions of the school committee and the superintendent of schools are poorly defined, the school committee reserving certain duties which rightly belong to the salaried executive of the committee, the superintendent of schools, and delegating to him some powers and duties which they should retain. Conditions in Town C lead to a divided responsibility, so that neither school committee nor superintendent can be held responsible for successes or failures in the school system.

When trouble arises in a town where responsibility is not centralized, the superintendent of schools is often made the scapegoat, as he is the only appointed officer upon whom blame can be placed. The administration of schools in Towns A, B and C in no case conforms to sound principles of school administration or business practice, and efforts to bring about an improvement in administrative procedure in such towns should be encouraged and supported.

To better conditions in the state of Massachusetts the State Board of Education called, in the fall of 1914, a series of one-day conferences at the several state normal schools and conducted a one-week conference with superintendents of schools at Cambridge. In the spring of 1915, a series of fifteen conferences with members of school boards were held in various parts of the state and representatives of the school boards of 71 per cent of the towns of the state were in attendance. As a result of these conferences, the State Board of Education has laid down the following propositions for the business management of the schools:

(a) The efficient conduct of the public schools require that—

1. Definite administrative responsibilities should be assigned to the school committee as a whole, and to the superintendent,—

(a) By defining the functions of the school committee as a legislative and deliberative body.

(b) By defining the functions of the superintendent of schools as an executive.

(c) By determining the responsibilities and relationship between superintendent and school committee.

2. Sound methods of administrative procedure should be established—

(a) In the business department of the schools.

(b) In the educational department of the schools.

(b) The school committee is charged with final responsibility for passing upon suggestions and recommendations made for the improvement of the schools. As such it is an essentially legislative body and should center its activities in—

1. Deciding as to general educational policies of the town.

2. Defining the duties, powers and responsibilities of superintendents of schools, teachers, and other school officers—

3. Determining methods of procedure in—

(a) Making the annual budget.

(b) Selecting and purchasing textbooks and supplies, equipment, and apparatus.

(c) Keeping school records and accounts.

(d) Employing and assigning teachers.

(e) Employing janitors, school physicians and nurses.

(f) Developing courses of study.

(g) Conveying of pupils.

(h) Deciding special cases of discipline.

(c) A sound educational policy for any town must be based largely upon an understanding of local conditions. It is the duty of the school committee to discover the kind of education which will function most effectively within the community. For example, in a farming community the educational policy may well provide opportunities for children to become acquainted with modern farm methods, household arts, and kindred subjects. The committee should consider how the best interest of the community would be served if, in addition, courses in commercial and technical subjects were offered. It may also ascertain what part of the high school work shall be devoted to purely cultural subjects, and what parts to commercial, agricultural and industrial subjects. The school committee, having decided on the kinds of education to be offered, will adopt plans and proposals for developing the required means of instruction.

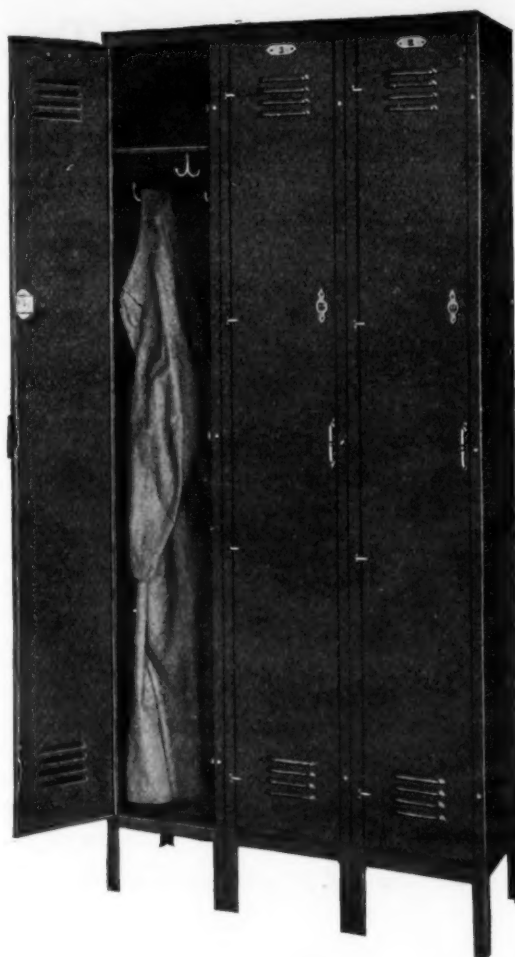
As part of a general policy the school committee may properly rule that no teacher shall be employed who has not had at least a normal school training; that no teacher who is a resident of the town shall be employed in the schools without at least a normal school training and one year's experience in some other community; and that no teacher shall be employed who is not recommended by the school superintendent.

In business matters the school committee may require that all supplies shall be purchased on the basis of competitive bids, and also determine the manner of awarding contracts.

(d) Legally the superintendent of schools is the executive officer of the school committee, but the law is general and may be given various specific interpretations. School committees should, therefore, define clearly the powers and duties of the superintendent of schools and hold him responsible for results. The superintendent of schools should have the training, experience, opportunity and time required to secure information bearing upon problems of educational administration, and should therefore have large responsibilities placed upon him. He should be required to make frequent reports to the committee on the conditions and needs of the schools; he should present in written form, for the consideration of the school committee, recommendations as to policies, including programs for the improvement of the schools, on approval of which by the school committee he should be given authority and means sufficient to produce results. He should be intrusted with the discharge of all plans for the improvement of the schools, and should be regarded as the active executive head of the schools, members of the school committee as individuals having no specific executive authority. In regular meeting, of course, the committee has all authority, subject to its own rules, to determine the methods of procedure to be followed by the superintendent.

The recommendations made in the conferences were that the powers and duties to be definitely delegated to the superintendent of schools by the rules of the school committee should include the following:

1. A periodical physical survey of, and written report on, the school plant as affecting—



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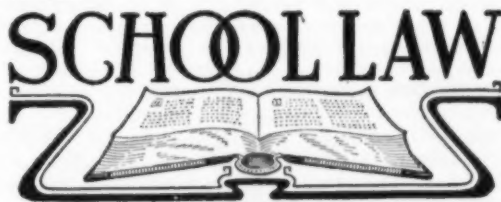
- (a) Health protection.
 - (b) Fire protection.
 - (c) Accommodation of pupils.
 - (d) Expense of up-keep.
 2. The keeping of school accounts and school records as secretary of the school committee, including responsibility for records of school committee meetings and correspondence.
 3. The selection of teachers, subject to the approval of the school committee.
 4. The selection, with the assistance of his teachers, of textbooks and supplies, to be purchased under his direction, with the approval of the school committee.
 5. The making of minor repairs on school buildings, and reporting to the school committee necessary larger repairs, the superintendent to be consulted on all repairs to school property.
 6. Passing upon plans for school buildings.
 7. Making recommendations on the selection of janitors, school physicians and nurses.
 8. The direction of all service employed by the school committee.
 9. Passing upon special cases of discipline.
 10. Preparing contracts for the transportation of pupils.
 - (e) The school committee should adopt rules and regulations defining the duties and powers of teachers, janitors, school physicians, and nurses. In every instance these officers should be responsible to the superintendent of schools, and the superintendent should be required to make frequent reports as to the qualifications of these officers for the positions which they hold, and should be given definite authority in directing their work.
- In the rules and regulations adopted by the school committee methods of procedure in the following matters should be prescribed:
1. *Estimates and Accounting.*—The time and manner of preparing the annual budget; the monthly date on which bills should be presented for payment; the method of making requisition for supplies and equipment; the checking of supplies on hand and received.
 2. *Awarding of Contracts.*—The school committee should indicate that all bids for contracts are to be submitted to the secretary of the school committee, and to be presented by him at a regu-

lar or special meeting of the full committee for consideration.

3. *Transportation Routes.*—The school committee should define its position in regard to the transportation of children and should establish conveyance zones, or indicate factors determining whether a child shall be conveyed or not, as, for example, distance from the school, age and physical condition of the child, and condition of the roads and surrounding country.

4. *School Discipline.*—Parents should be informed that in cases of discipline the order of procedure is to refer the matter directly to the teacher. When satisfaction cannot be obtained from the teacher, the case should be referred to the principal of the building, then to the superintendent of schools, and if these officers fail to settle the case, and the parent is still aggrieved, the matter may be brought to the attention of the school committee at a regular meeting. All complaints presented to the school committee should be in writing.

As far as practicable, procedures should be firmly established, so as to avoid complications and embarrassments in the administration of the schools.



Private Schools and Academies.

An academy organized as a body corporate and politic could be dissolved by the Legislature by act No. 24 of 1915 (extra session), protecting contract rights of the institution and its creditors, where institution had actually ceased to exist for long term of years.—School Board of Caldwell Parish v. Meredith, 71 So. 209, La.

An institution of learning organized as a "body politic and corporate" and partially endowed by the state and by the United States is a quasi public corporation.—School Board of Caldwell Parish v. Meredith, 71 So. 209, La.

The board of trustees of an academy are without authority to dissolve or undertake liquidation of the corporation in absence of charter provision therefor.—School Board of Caldwell Parish v. Meredith, 71 So. 209, La.

Schools and School Districts.

The Michigan complete laws of 1897, in a chapter entitled "Formation, Alteration, Meetings and Powers of Districts," apply to alteration of a school district and attaching it to another district. School Dist. No. 3, Chester Twp. v. Green, 157 N. W. 266, Mich.

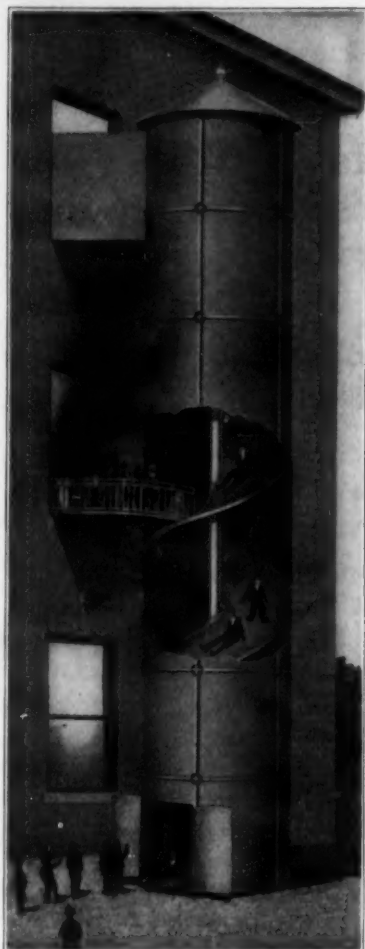
The Michigan complete laws of 1897, in a chapter entitled "Formation, Alteration, Meetings and Powers of Districts," give the right of appeal from the decision of a township board, detaching property from one school district and attaching it to another, to taxpaying electors having property within the school district to which the property is attached.—School Dist. No. 3, Chester Twp. v. Green, 157 N. W. 266, Mich.

Arbitration to equalize property and debts of school districts on change of boundaries resulting in the award of a specific sum to one district is pursuant to the North Dakota complete laws of 1913 (§§ 1327-1331), requiring county auditor to extend tax on property within a district to pay the award.—School Dist. No. 94 v. Special School Dist. No. 33, 157 N. W. 287, N. D.

A school district cannot maintain action at law on an award by arbitrators on change of boundaries, the remedy being by mandamus to compel the collection of the tax.—School Dist. No. 94 v. Special School Dist. No. 33, 157 N. W. 287, N. D.

A vote on forming a consolidated school district under the Oklahoma laws of 1913, c. 219, article 7, may be taken and registered by a standing vote and count; it not being essential that it be by ballot under the general election laws, since such a vote is not an "election," within the constitution, requiring a vote by ballot.—Pitcher v. Dervage, 156 P. 218, Okla.

Under the Arkansas acts of 1909, providing for the establishment of rural school districts, a notice of election, which gave actual notice to the great majority of the voters, was sufficient, altho not in strict compliance with the statute, and the election was valid.—Rural



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Special School Dist. No. 6 v. Blaylock, 183 S. W. 525, Ark.

Under the Illinois laws of 1915 (p. 630), legalizing high school district elections determined by women's vote, under Hurd's revised statutes of 1913 (c. 122, ¶¶ 97a-97g), is held valid.—People v. Militzer, 112 N. E. 57, Ill.

School District Government.

Where the county superintendent of schools erred in judgment and discretion, but there was no fraud, neither he nor his bondsmen are liable for such error which resulted in overpayment of teachers, etc.—State v. Green, 71 So. 171, Miss.

The remedy of a person claiming to have been elected trustee of a school district against another claimant is by appeal to the commissioner of education, as authorized by the New York Education Law, ¶ 880.—In re Humphrey, N. Y. 157, N. Y. Sup.

Where an equal number of votes was cast for each of two sets of election officers at an election of school trustee, an election held by neither was valid, and there was vacancy, to be filled by county board of education, under the Kentucky statutes, ¶ 4426a, subsec. 4.—Ison v. Watson, 183 S. W. 468, Ky.

A school trustee, recognized by county superintendent, is a de facto trustee, whose acts are valid, tho his election was void.—Ison v. Watson, 183 S. W., 468, Ky.

School District Property.

Under the South Carolina civil code of 1912, ¶ 1761, the trustees of a school district, who represented to electors to induce them to petition for an election on a bond issue, that they would locate the proposed school building on a certain site, did not thereby divest themselves of the right to freely exercise their discretion for the best interest of the district.—Sarratt v. Cash, 88 S. E. 256, S. C.

Taxation.

The West Virginia acts of 1915, c. 85, ¶ 8, are held not to create any new right to interest on orders for school money; the provision for interest extending only to rights to interest based on law other than such act.—State v. Hamilton, 88 S. E. 103, W. Va.

School orders do not in any case bear interest;

the West Virginia code of 1913, merely inflicting a penalty on the sheriff for nonpayment on presentation, and not making them bear interest against the issuing boards.—State v. Hamilton, 88 S. E. 103, W. Va.

Where an election held under the North Carolina laws of 1911, c. 135, after tax for a special school district created under the revision, ¶ 4115, had been levied for the year, was in favor of abolition of district and repealing the taxes, such tax is valid for the ensuing year.—Mann v. Allen, 88 S. E. 235, N. C.

Claims Against District.

Action by a trustee and a claimed trustee of a school district for an injunction against another claimed trustee and teacher, resulting in judgment that it was no proper case for injunction, did not affect property or interest of district, within the New York Education law relating to payment by district of costs incurred in such action.—In re Humphrey, 157 N. Y. S. 807.

Teachers.

A female teacher, removed at her own request from teaching staff after twelve years' service, to serve as "additional teacher," with largely clerical duties and teaching only in emergency is held not entitled to annual increment under the revised city charter, as amended by the Davis law.—McKenna v. Board of Education of City of New York, 157 N. Y. S. 912.

Pupils.

Under the Kansas general statutes of 1909, ¶ 7478, school district boards may provide that branches, including music, other than those enumerated in this section, shall be taught.—Epley v. Hall, 155 P. 1083, Kans.

The uniform course of study prepared for 1914, under the Kansas laws of 1913, c. 272, is held to authorize teaching of music in district schools.—Epley v. Hall, 155 P. 1083, Kans.

School district boards may determine whether all subjects, including music, shall be taught by a single teacher or whether music shall be taught by a specially qualified teacher.—Epley v. Hall, 155 P. 1083, Kans.

Qualifications of Voters.

The Woman's Suffrage Act of Illinois does not authorize women to vote upon the question of

organizing high school districts under the Township High School act of 1911.—People v. Militzer, 112 N. E. 57, Ill.

The fact that one owns land in a school district does not entitle him to vote there, where he never maintained any home on the land, but resided with his father in another sub-district.—Ison v. Watson, 183 S. W. 468, Ky.

LEGAL NOTES.

A recent decision of the Supreme court of Georgia upholds the contention of George H. Richter that the Chatham County commissioners were without authority in levying a tax for educational purposes. The decision is the result of injunction proceedings instituted last fall in the Superior court, by Mr. Richter in an effort to restrain the county commissioners from collecting a tax levy in 1915 for the schools amounting to \$156,000. The Savannah school board plans to have the legislature pass an amendment to the code under which it may levy taxes for schools, the taxes to be paid directly to the board.

The treasurer of an independent school district, when appointed by the board to fill a vacancy, holds office not merely until the next election but for the unexpired term, according to the attorney general of South Dakota.

Absence of any statute provision specifically concerning the treasurer, has caused the attorney general to conclude that as the provision refers expressly to members of the board only, it is evident that the treasurer is appointed to serve for the unexpired term.

The court of appeals of Lima, O., in the case of the Auglaize township schools, has held that the rural school laws are valid and according to the state constitution. The decision is the first in Allen county and sets a state-wide precedent as to the constitutionality of the laws. The court, in its opinion, declared that members of county school boards are "Officers of the county and that, as such, they must be chosen by the electors, and not by the president of the village and township school boards of the county."

The Louisiana state legislature has approved the Johnson bill allowing women to serve on educational boards.

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The Practical Work of a Research Bureau.

The Bureau of Research of the New Orleans board of education, under Dr. David S. Hill, has accomplished some valuable work during the past year. Dr. Hill with the assistance of Miss Mary Ralley, has compiled statistics on repeaters and exceptional children; delivered lectures to classes of prospective teachers; compiled information on the reasons for withdrawals from school; listed vocations of girls with reference to education; conducted a detailed study of courses and methods in kindergartens; undertook a study of spelling; examined new textbooks; conducted tests in reading and arithmetic; compiled some special information on grade distribution, also on the plan and work of the Delgado Trade School.

The Bureau in November, 1915, completed a study of repeaters in the different schools with a view of eliminating the great waste of teachers and pupils thru a repetition of past work. In the white schools, there were four hundred children repeating the work of a grade for the third or fourth time. The total number was estimated at five thousand, or enough pupils to fill ten schools of five hundred each.

In the matter of exceptional children, the Bureau continued the studies of individual children in an effort to inform parents and teachers. In each case, written reports were made upon the basis of findings by teacher, physician, social investigator and psychologist.

The director delivered fifty lectures to the senior class of the Normal School. In addition, there were prescribed readings on school health topics. The entire course was practical in character and served to emphasize the value of scientific methods in school work.

According to estimates of the school officials, fifty per cent of the pupils entering the first grade never complete the eighth grade. The data relative to withdrawals was taken from the records of the teachers in each of the 71 schools. These reports were later amplified by direct information from the homes showing the number of cases and the reasons for withdrawals.

To properly correlate the work of the Nicholls Industrial School with the work of the regular schools, a systematic study of the needs of working girls, and the opportunities for employment was made by Miss Ralley. The work supplements what has been done for boys and men, preparatory to the establishment of the Delgado Trades School.

The study of kindergarten courses and methods occupied three weeks. The results were compiled and issued in the form of a report for the use of the superintendents.

The examination of textbooks was undertaken in co-operation with a number of school officials and covered three weeks. The results are contained in a special report distributed among the superintendents.

The Bureau, with the help of superintendents, principals, teachers and normal graduates, conducted a study of the spelling work of 25,000 children. The tests occupied less than ten minutes and were conducted with the aid of the Ayres scale. The correction of the papers was done by the Bureau's assistants.

The above work has all been accomplished with an appropriation of \$4,000, exclusive of the cost of reprints of articles and reports. The expense of the Bureau last year was \$4,036, of which \$2,000 was appropriated by the Commission Council to cover a portion of the expense connected with the vocational survey.

SCHOOL BOARD NEWS.

Brooklyn, N. Y. The board has approved a recommendation of the building committee requesting that the board of estimate appropriate \$227,000 for the erection of dormitory buildings and an infirmary at the Parental School, Flushing, L. I.

Boston, Mass. The board has granted leave of absence on full pay for a period not exceeding three months to employes who are members of the national guard.

The Supreme court of Massachusetts has dismissed the suit of ten taxpayers of Salem against the mayor, council and treasurer of the city, to restrain them from appropriating \$110,000 for improvements in one of the school buildings. The petitioners claimed that only the rebuilding commission had authority to enlarge the school, altho it was outside the fire limits of the city.

Winchester, Mass. A summer school for pupils in the upper grades has been opened in one of the school buildings.

Boston, Mass. Summer schools have been opened in four buildings.

Suit for \$5,000 has been entered in the East Cambridge (Mass.) court by John V. Finn against the town of Belmont. The suit is the result of the action of the school committee in expelling William Finn, a son, from the high school. The boy was suspended in March for alleged misconduct and lack of application to his work. The father demanded a hearing before the board. This the board refused and the boy was subsequently expelled in the following April.

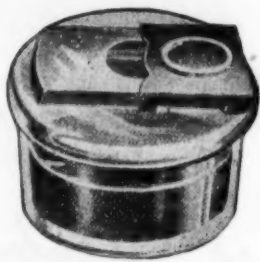
Oakland, Cal. The board has created the position of superintendent of buildings and grounds. The new office is in line with a proposed reorganization of the department recommended by the civil service board recently.

Pittsburgh, Pa. The annual report of the school lunchrooms shows that the business has grown from one to five lunchrooms, with an increase in business from \$7,000 to \$18,000, during the two years the system has been in operation. About two thousand lunches are served daily to students at five schools, most of them being three-part, five-cent orders.

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Pat. Jan. 19, '06



Pat. Nov. 14, '11

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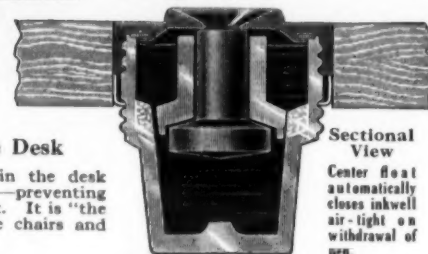
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The system was begun in September, 1914, with Miss E. Cornelia Giddings in charge. The director, equipment, light, heat and power were furnished by the board. The necessary help which includes 25 salaried employees and 40 student volunteers, is selected and paid by the director. The student volunteers receive their lunches in return for the service rendered. In addition to the regular lunches, the lunch department has served a five-course dinner to guests of the alumni association, a banquet for men, a banquet for school officials, and has conducted a number of other affairs.

Cleveland, O. A resolution has been introduced in the school board providing that the school year be lengthened by one month, and that the entire school plant be operated for a period of twelve months.

Winchester, Mass. Beginning with September, the school day for the seventh and eighth grades will be one-half hour longer. In the high school, the day will be one hour longer than formerly. The change permits a longer recitation period and time for supervised study and individual help.

A survey of the schools of Brookline, Mass., has been begun by Mr. James H. Van Sickle of Springfield. Mr. Van Sickle is assisted by two experts. A preliminary appropriation of \$750 has been made to cover the first cost of the survey.

The District Court of Denver, Colo., has ruled that Clarence J. Morley is not a member of the board of education and that his place rightfully belongs to Benjamin C. Hilliard. Mr. Morley was elected to the board following a break between the Guyer and Hilliard factions. During a meeting at which neither Mr. Hilliard nor Mr. Knight were present, Mr. Hilliard's seat was declared vacant because, it was alleged, its occupant had surrendered it by accepting an office at Washington. Thereafter Mr. Morley continued as a member and took part in the discussions of the board despite the protest of Mr. Hilliard. As a result of the decision Mr. Hilliard took his seat at the next special meeting of the board.

St. Louis, Mo. The board has designated a number of public schools for library branches during the summer. Special attention is given to chil-

dren's books and a reading room for children has been opened.

Milwaukee, Wis. The textbook committee of the board has recommended that the medial slant system of writing be used in place of the vertical system.

Huntington, W. Va. Mr. V. T. Ritter has been appointed as school architect and supervisor of building repairs.

Manhattan School District in Wayne County, Oklahoma, has a school board composed entirely of women. Three young women, Mrs. Laura Beals, Mrs. Rosa Beals and Mrs. Maysell King have entire charge of school affairs. The trio have completed one term in office and are now entering upon the second.

Alton, Ill. The change in women's dress from long skirts and low shoes, to short skirts and high boots, has made it possible for the board to make a considerable saving in floor oil. In the past the board has been compelled to use a high priced oil because of the complaint that the teachers' skirts were damaged. In the future it will be possible to purchase a cheaper grade which is about one-half as expensive as the oil used at present.

New Bedford, Mass. The board has rescinded its rule barring the use of feather dusters by janitors. The change was made upon protest of the janitors who pointed out that it is impossible to get at certain parts of desks and furniture with ordinary cloth dusters. The danger to health is confined to the janitors alone as the rooms are well aired during the dusting process.

Philadelphia, Pa. According to a report by the controller for the year 1915, the schools are becoming more expensive each year. The receipts from all sources amount to \$12,133,165 and the disbursements amount to \$12,821,604. The receipts show a decrease of \$639,630 as compared with 1914, and the disbursements show an increase of \$1,053,562.

The receipts include \$7,823,104.72, which the city pays in school taxes; \$491,219.09 delinquent taxes, \$874,893.38 state appropriations and \$294,097.01 from miscellaneous sources. The 30-year loan of \$2,000,000 also is included in the receipts.

Receipts under the general account represent an increase of \$223,617.25 over 1914; the capital account, or money available from loans, a decrease of \$1,000,000; the sinking fund an increase of \$91,939.91; the retirement account or teachers' pensions an increase of \$21,404.60, and the secretary's account an increase of \$14,158.20.

The disbursements for the upkeep of the school system were divided into \$448,994,500 for administration purposes; \$6,213,930.96 for teachers' salaries, educational materials and supplies; \$730,375.28 for operation of schools; \$324,555.94 for maintenance; \$1,231,279.34 for debt service and fixed charges; \$235,973.22 miscellaneous expenses, and \$4,519.89 for work in progress.

Medford, Mass. After a careful study of the present school conditions, the board has accepted plans for a 3-story Junior High School building to be erected in the near future. The board has asked the city for an appropriation to cover the cost of constructing and furnishing such a building.

Memphis, Tenn. A recent report to the board shows that the lunchroom conducted at the Central High School is self-sustaining and that lunches are served to pupils at cost. The total expenses including salaries, amount to \$7,658.42.

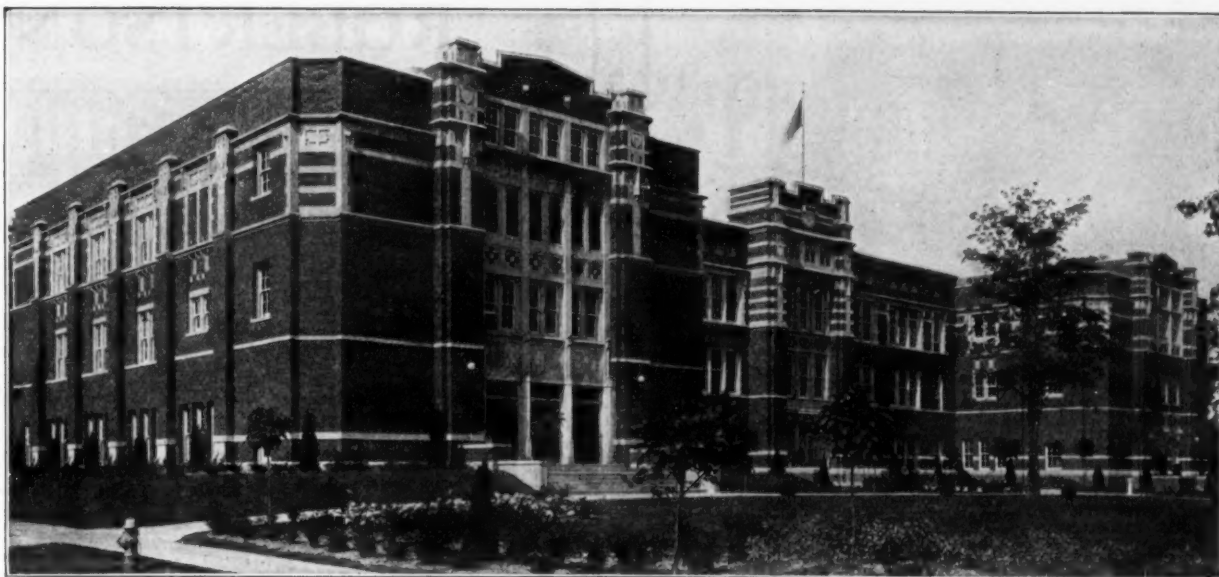
Marseilles, Ill. The board has ruled that applicants for teaching positions must agree to live in the town during the school year.

Duluth, Minn. The board has established two additional open-air schools, two for defective classes and one for deaf pupils.

Lyons, Ia. A six weeks' summer school has been opened for the benefit of backward students.

Grand Rapids, Mich. The Trades and Labor Council has asked the board to comply with the eight-hour schedule in awarding contracts for school work.

Chattanooga, Tenn. The board has adopted a rule providing that no woman teacher will be employed who is under 20 years of age, and no male teacher who is under 21 years. Supernumeraries will be delegated as substitutes when the regular teachers are absent. They will receive \$15 per month and \$1 per day for the time spent in school.



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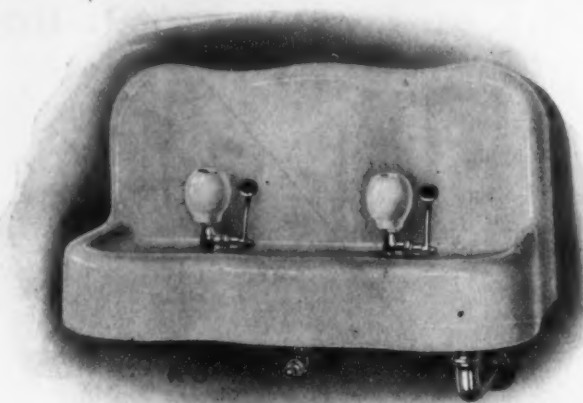


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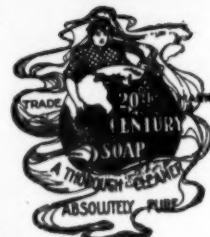
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CRITICISE BOSTON SURVEY REPORT.

The Survey Board of the Finance Commission, which recently criticised the Boston school system, and advocated among other things the abolishment of the Board of Superintendents, is made the object of an attack and criticism by Supt. F. B. Dyer and his assistants. The criticism which is in the form of a report is signed by Supt. Dyer and endorsed by the five assistant superintendents.

The report after taking up the criticisms of the survey in detail, pulls apart the recommendations and terms the work as theoretic. Many of the recommendations are considered impractical.

Discussing the abolishment of the board of superintendents, the report says: "This revolutionary recommendation of the Survey Committee has been repudiated recently, both by the school committee and by the legislature of the state." The report adds that the board is doing the same work that is now being done by the New York Board of Examiners, for which the examiners are each paid \$6,000 per year. In addition, the New York school system has a board of superintendents, while the Boston board performs the duties of both offices.

The report points out that the work which the board of superintendents has performed is very important, especially in the matter of the rating of teachers. This the survey experts have entirely overlooked.

In the opinion of the Boston school authorities, the greatest educational achievement of the past decade is the establishment of eligible lists, upon which are placed the names of all candidates for appointment as teachers in the service. The lists are prepared by the board of superintendence in accordance with civil service regulations.

The Board also rejects the recommendation that the salary board be abolished, that reorganization of district supervision of elementary schools be made, criticizes the omission of references to the junior high schools, terms the recommendations on high schools as "platitudinous" and opposes the recommendation that the power of Supt. Dyer be made absolute.

Of the last named the report says:

"The major premise, around which the whole report is constructed, is a theory and a fiction, namely, the absolutism of a Superintendent of Schools.

"This officer is the only 'expert' whom the Survey Committee discovers in the whole school system and his office seeks to exalt beyond all reasonable proportions. The Superintendent of Schools, in the opinion of the Survey Committee, should be the executive officer, not merely of all educational activities, but he should be Superintendent of Schools, Business Agent, Secretary of the School Committee, Schoolhouse Custodian, Board of Superintendents, Board of Apportionment, Salary Board and Trial Board all rolled up into one.

All in all, the report of the Survey Committee is disappointing and depressing according to Boston school officials. It shows a lack of appreciation of the history and genius of the Boston schools. It is not creative in character and in many respects is destructive and retrogressive.

On one point, Supt. Dyer seems to disagree with his colleagues, on the matter of the functions of administrative officers. He makes the point that he desires neither an autocracy, in which one person is responsible for everything or a bureaucracy, in which a few heads of departments have well-defined, unmistakable and undivided authority in the exercise of which they are not absolute, but are responsible to the board.

A DEMONSTRATION SCHOOL IN KENTUCKY.

A "demonstration school" of an interesting character was conducted during the month of June at the Eastern Kentucky State Normal School at Richmond. The school which was conducted in connection with the summer school of

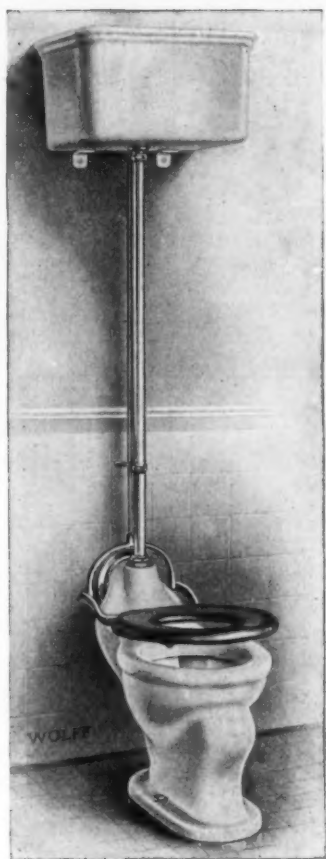
the Normal, was concerned especially with the problems of the one-teacher school as they present themselves from day to day. It presented the organization, management, discipline and instruction for a one-teacher school; the proper teaching of vocational farm subjects; the extension of school activities thru the formation of boys' and girls' clubs; the teaching power of older pupils in tutoring younger children; the improvement of the school thru the teaching ability of the adults of the community and thru the utilization of available educational resources; lastly, thru the standardization of these activities so that inexperienced teachers may profit by them.

The school consisted of forty pupils from the first to the eighth grades inclusive. The school was divided into five classes, these taking the work of the seven grades according to the state course of study. State textbooks were used exclusively.

The teaching methods of the normal school and the daily work of the model school were adapted to the needs of the Demonstration school so far as the lesson periods and the number of classes permitted. It was also shown how far a teacher of a one-room school might safely go in imitating the pedagogical theories of the normal classes and the ideal work of the model school and in applying them to her own work. To do this, the teacher consulted the grade specialists of the model school and subject specialists of the normal.

Above all, the school showed how to direct the study of the pupils so that they may get the essential things in the lessons and how they may concentrate on the essential facts and principles in the recitations.

The school showed how the education of the head, hand and heart may be correlated, and how cultural and utilitarian subjects may be taught so that each will help the other. To this end, the school demonstrated the teaching of nature study in applied form, agriculture, home economics, cooking and sewing and farm mechanics. These subjects were taught in two ways, thru correlation with other subjects, and as separate and distinct studies. In correla-



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tion they were taught with those subjects which make correlation easy and natural. As separate subjects, there were two lessons given each week in home economics, two in agriculture, and one in farm mechanics. The classes met frequently as clubs to encourage the social development of the pupils. There were also supplemental readings with weekly reports from the pupils.

The school was equipped as a standard one-room school, and sought to carry out the purposes and plans of such an institution.

Mr. T. J. Coates was the director and Miss Miriam Noland the teacher.

FOR BUSY SCHOOL SUPERINTENDENTS.

Grand Rapids, Mich., occupies third place among the cities of the country in the amount of money deposited in school banks. During the past year there were 8,250 pupil depositors and a total of \$77,515.66 on deposit. Iona School had the best record for saving and the Lafayette School had the largest amount on deposit.

Champaign, Ill. The annual report on the savings of school children shows that 632 pupils in the grades have deposits amounting to \$22,222. Of these, 102 pupils have opened savings accounts under the special system adopted, with deposits of \$314.23. At present, about one-third of the school children have deposits in the bank.

Fifty-two per cent of the children of the elementary schools of Wisconsin are over age, according to a study made by the Wisconsin Efficiency Bureau. Twelve per cent are under age. The cost of "repeaters" during the school year 1914-15 is estimated at \$354,000.

Elmhurst, Ill. A summer school has been opened.

Wichita, Kans. A census of the city just completed, shows that there are 14,500 children of school age. This is an increase of 2,342 over that of last year's figures.

Toledo, O. Supt. Guitteau has issued instructions that children are to be admitted to public school playgrounds during the vacation. The privilege is extended to the children as long as good order and respect of public property are maintained.

Worcester, Mass. The board has adopted a reso-

lution providing for a sabbatical year for teachers. Any teacher, with the approval of the superintendent and board may obtain a year's leave of absence for study and travel. Such teachers will receive half pay during leave of absence.

Vandergrift, Pa. A summer school for exceptionally bright pupils was conducted for 25 days under the direction of Supt. T. T. Allen. The classes were limited to pupils who had attained an average of 90 in major subjects. Promotion to higher grades was made upon evidence of satisfactory marks in examinations.

The County Superintendents' Institute for the state of Texas was held July 25 to 28 at Austin. Among the speakers were such well known men as State Supt. W. F. Doughty, Austin; Dean W. S. Sutton, Austin; Dr. J. L. McBrien, Washington, D. C., and Dr. J. C. Muerman, Washington, D. C. Illustrated evening lectures were given by Dr. Muerman in the evening on the university campus.

Elyria, O. The board has ordered that special classes for backward pupils be discontinued because of lack of funds. The need of these schools has been shown by Supt W. R. Comings in a survey of the number of pupils in each of the

schools. It is pointed out that these pupils in the various classes keep the remaining pupils from progressing, and that they also work a hardship on the teachers because of the special attention which must be given them.

New York, N. Y. A resolution has been presented to the board by Abraham Flexner, requesting that a searching investigation be made to determine the number of teachers and principals who may be rated as incompetent or inefficient. The proposed inquiry affects about 21,000 members of the teaching and supervisory corps. The resolution asks that an explanation be made of the reason for retaining these teachers, and the method which may be employed at present for discovering and eliminating them. The reason for the inquiry is traced to the examination of a teacher, who had been placed on the eligible list for a high school position, and later failed in three successive tests.

The American Federation of Teachers has begun a nation-wide campaign to recruit its ranks from every school system in the country. The Federation agrees to send special organizers into any city or town where the teaching staff is ready for unionization.

The Supreme court of New Jersey, in a recent decision, has ordered the Paterson board of education to pay teachers under ten years of service, their salary on the basis of ten installments. The board had adopted a rule providing that the salaries of teachers be paid in twelve installments which, in effect, called for a reduction of salaries. The action of the board was attacked by three teachers and their contention was upheld by the state commissioner and by the state board. The decision of the Supreme court affirms the judgment of the state board.

In its decision, the court stated that "the right of the relators to their salaries having been determined, their legal rights to payment in accordance with the judgment formerly handed down was incontestable in the present proceedings.

"The duty of the school board to levy the tax to pay the judgment or to perform such other duties as may be necessary to discharge the obligation becomes imperative."



MR. O. M. ELLIOTT
President-elect State Normal School, Lewiston, Idaho



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PERSONAL NEWS OF SUPERINTENDENTS

J. C. BROWN TO ST. CLOUD.

J. C. Brown, professor of education and principal of the university high school, University of Illinois, Champaign, has been elected president of the State Normal School at St. Cloud, Minn. Prof. Brown succeeds the late W. A. Shoemaker.

Dr. Brown received his bachelor's degree from Hanover College, Indiana, in 1901. After leaving college, he obtained a position in the high school at Noblesville. He remained two years, resigning to accept the superintendency at Paoli. From there he went to the Illinois State Normal School at Charleston, where he remained six years. He resigned later to take postgraduate work at Teachers College, and afterward became supervisor of mathematics in the Horace Mann school at Teachers College. After five years he resigned to become dean of the College of Education at the University of Minnesota. He occupied the directorship of the College of Education of the Illinois University until appointed at St. Cloud.

President Brown is a co-author of two books on mathematics and has prepared special bulletins for the United States Department of Education.

LOUIS BONEBRAKE PASSES ON.

Louis D. Bonebrake, formerly president of Indiana Central University, and at one time state commissioner of schools for Ohio, died on June 27th at Indianapolis, Ind. Mr. Bonebrake was 57 years old.

Mr. Bonebrake was state school commissioner of Ohio from 1898 to 1904. Previous to that he served as superintendent of schools at Akron and at Mt. Vernon, O. In 1909 he left Columbus to become president of the Indiana Central University, which he held for six years. He resigned a year ago.

At the time of his death, Mr. Bonebrake was

preparing to move to Lancaster, O., where he had been appointed to the superintendency.

PERSONAL NEWS.

Supt. W. L. Steele of Galesburg, Ill., has been re-elected for his thirty-second consecutive term.

Brazil, Ind. Mr. E. W. Montgomery of Bedford, Ind., has been elected principal of the new Senior High School and Mr. E. M. Muncie, of Brazil, principal of the Junior High School.

George H. Black, president of the Normal School, Lewiston, Ida., has been elected to a similar position at Ellensburg, Wash. Prof. Black is succeeded at Lewiston by Prof. O. M. Elliott of Salem, Ore.

W. E. Maddock, superintendent of schools at Superior, Wis., for the past eleven years, has been elected to a similar position at Butte, Mont.

Miss Bettie A. Dutton of Cleveland, O., who this year completes 58 years of service in the public schools, was recently given a public reception by the teachers of the city. Two generations of pupils and former graduates taught by Miss Dutton were present, as well as teachers and friends of the veteran teacher. A program of

music was given. At the close a silver loving cup and an autograph book were presented.

Mr. N. L. Engelhardt of Dunkirk, N. Y., has taken up his new work as instructor in the Administration Department of Columbia University. Mr. Engelhardt became superintendent of schools in 1913.

L. L. Caldwell of Montezuma, Ia., has been elected superintendent of schools at Monmouth, Ill.

J. G. Moore of Paris, Ill., has been elected superintendent of schools at Superior, Wis.

Oscar F. Weber has entered upon his duties as superintendent of schools at Belleville, Ill.

Supt. Charles J. Koch of Baltimore, Md., has been re-elected for the next two years.

W. M. Clark of Marshalltown, Ia., has been re-elected as secretary of the board.

The salary of Supt. W. A. Greeson of Grand Rapids, Mich., has been increased from \$4,000 to \$4,500.

Mr. J. D. McCollister has been re-elected secretary of the board at Davenport, Ia.

Mr. W. E. Carroon, formerly superintendent of schools at Clovis, N. Mex., has succeeded Mr. Rupert Asplund as chief clerk of the New Mexico State Department of Public Instruction.

Mr. Glenn W. Starkey, deputy state superintendent of schools for Maine, has been elected temporary state superintendent to fill the unexpired term of Payson Smith resigned.

Mr. Linden McCullough of Roslyn, Wash., has been elected superintendent of schools at La Grande, Ore.

Mr. C. J. Brewer of Chippewa Falls, Wis., has been elected as head of the training department of the Eau Claire Normal School, Eau Claire, Wis.

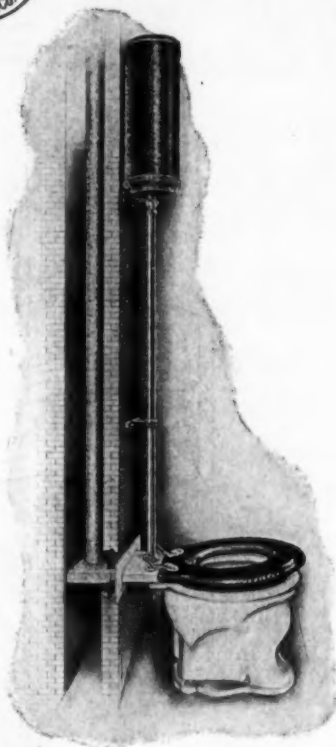
Mr. F. A. Soper, formerly superintendent of the public schools of Baltimore, Md., and more recently head of the Teachers' Training School, has resigned.

Mr. Edwin H. Hebden, a former group principal in the schools of Baltimore, Md., has been elected school statistician. Mr. Hebden's duties will be the supervision of the business offices and the tabulation of data on school matters.

Mr. A. W. Beasley, superintendent of schools-



J. A. WHITEFORD
Superintendent of Schools, Oklahoma City, Okla.



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elect at Peoria, Ill., was the recipient of a gold signet ring. The gift was a token of appreciation from the members of the high school faculty with whom Mr. Beasley had previously worked. Mr. F. D. Cram, principal of the central schools of Mason City, Ia., has been elected superintendent of schools at Cerro Gordo.

Mr. H. M. Fairey has been re-elected clerk of the board at Oklahoma City, Okla.

Mr. Wm. P. Musch has been re-elected superintendent of school buildings at Hamilton, O.

Mr. J. V. McMillan, for fourteen years superintendent of schools at Marietta, O., has resigned.

Mr. J. H. Doyle of Huron, S. D., has been elected superintendent of schools at Independence, Ia., to succeed J. L. Cherny.

Mr. Frank C. Goff, supervising engineer of the schools at Denver, Colo., has been elected assistant superintendent. The salary has been fixed at \$4,000 per year.

Mr. Scott Perdue has been elected superintendent of school buildings at Peoria, Ill.

Mr. Harvey T. White of Carlinville, Ill., has been appointed head of the Soldiers' Orphans' School at Bloomington, Ill. The school has recently been taken over by the Bloomington Normal School.

San Bernardino, Cal. Supt. R. B. Stover has been re-elected for the ensuing year.

W. N. Beetham, for nine years superintendent of schools at Bucyrus, O., has resigned.

C. E. Spaulding of Decatur, Ind., has been elected superintendent of schools at Columbia City. The appointment is for three years.

Supt. I. I. Cammack of Kansas City, Mo., has been given an increase of \$600, making his salary for the next year \$6,000.

The Washington State Board of Education has affirmed the action of Supt. Josephine rreston in revoking the license of Richard Clifton, a teacher. Clifton's certificate was revoked because he failed to abide by a contract which he entered into last fall with the school board at Sedro-Woolley.

Mr. F. R. Neild has been elected superintendent of schools at Hornell, N. Y. He succeeds Dr. Elmer S. Redman, who has been elected superintendent of the Port Chester, N. Y., schools.

Dr. Albert Shiels, director of reference and

research of the New York Board of Education, was recently elected superintendent of the Los Angeles public schools for a term of four years to succeed John H. Francis. Mr. Shiels's salary will be \$8,000 a year. He will assume his duties in September.

Dr. Shiels was educated in the New York public schools and received his A. B. in 1886. From 1887 to 1890 he was cashier of the Panama railroad and in charge of the British consulate and international mail station in the city of Colon. He served as consul for Mexico at Colon and at Panama.

In 1890 he returned to New York and for nine years taught in the various grades in the public schools and as principal of the largest evening school in New York City. He was the first principal appointed in the city of greater New York, obtaining the highest rating at the examination, the first competitive examination held in the greater city.

In 1906, Mr. Shiels was appointed district superintendent of schools, the selection being made from among four hundred school principals.

Mr. Shiels is the originator of new methods of professional co-operation of teachers. He was

one of those responsible for increasing the number of New York's trade schools from three to seven. The short unit courses in trade instruction, which are now recognized as essential to all proper continuation instruction were started under his administration. At the close of the year 1913 Mr. Shiels was offered the position of director of the division of reference and research of the department of education. In 1915 Mr. Shiels was elected director of the Peoples' Institute, an organization of international reputation. Supt. R. J. Tighe of El Paso, Tex., has been re-elected for a two-year term.

At the meeting of the Massachusetts Public School Janitors, held June 12th at New Bedford, Mass., Mr. John Swindells of Fall River, Mass., was elected president; Mr. Charles H. Edwards of Worcester, vice-president, and Mr. Wallace Tilton of New Bedford, secretary.

Dr. Thomas A. Storey, Director of Physical Training at the City College, New York City, has just been appointed State Inspector for Physical Training. The appointment was obtained thru the State Military Training Commission, which gives Dr. Storey supervisory control of the military activities in schools as provided in the new state law. The appointment of Dr. Storey has been made in connection with the organization of a Military Training Commission which is charged with the duty of making a broad interpretation of physical training such as will fit young men for citizenship in peace as well as in war.

Dr. Storey previous to his appointment was professor and director of hygiene in the City College of New York. He is a physician and a physiologist and is well equipped for the duties which he will undertake.

Miss Minnie J. Nielson, superintendent of Barnes County, North Dakota, has been appointed to the county superintendents' Department on the State Board of Education.

Supt. H. L. Belisle of Fall River, Mass., has been re-elected. Mr. Belisle's salary has been increased from \$3,500 to \$4,000 per year.

P. S. Barnes of Bristol, Tenn., has been elected superintendent of schools at Johnson City.

Frank B. Perkins, for twenty years secretary of the board at Elgin, Ill., has resigned.



MR. ERNEST A. SMITH
Superintendent of Schools-elect, Salt Lake City, Utah.

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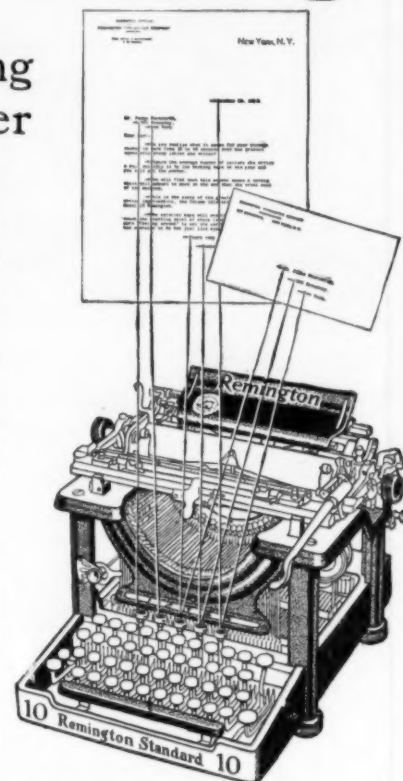
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J. A. Whiteford, for twelve years superintendent of schools at St. Joseph, Mo., has been elected to a similar position at Oklahoma City, Okla. He succeeds George V. Buchanan.

Omaha, Neb. The board has unanimously re-elected W. T. Bourke secretary of the board and Duncan Finlayson superintendent of buildings. Each will serve for a term of two years, at a salary of \$3,000.

W. W. Edwards, superintendent of Prince George and Sussex Counties, Va., has been elected State High School Inspector. He succeeds the late John B. Terrell.

Dr. Craighead Becomes Commissioner of Education.

Dr. E. B. Craighead, formerly president of the University of Montana, has been elected State Commissioner of Education for North Dakota.

Dr. Craighead is a graduate of Central College, Missouri, and also of the State University. He also pursued special courses at Leipzig and at Paris in Europe. As president of the University of Montana, he served from 1912 to the time of his present appointment. Dr. Craighead is an active member of the National Education Association.

Supt. H. B. Work of Lancaster, Pa., has been re-elected and his salary increased \$500 for the remainder of his term.

Walter B. McFarland, for ten years superintendent of schools at Silver City, N. Mex., has resigned to accept a similar position at East Las Vegas.

New Orleans Retrenches.

Facing a threatened deficit because of insufficient revenues to meet expenses, the board of directors of the New Orleans schools has decided upon a radical method of retrenchment.

First, it was planned to deduct one-half a month's salary from each teacher's pay. As the half month deducted is from the June salary during which time the schools are not in session, the teachers did not have to work without compensation. The second step is to discontinue the ratings to superior teachers and to effect a cut of \$10 in the salaries of teachers previously rated as superior. A cut has also been made in the salaries of administration officials from the superintendent down, equal to one month's pay.

Finally, the board has abolished the very efficient Department of Educational Research, conducted by Dr. David Spence Hill.

It is planned to vote in November upon an amendment to the state constitution, authorizing the board to hold an election on the levying of a two mill tax. This will give ample funds to restore the salaries of teachers and officials and to conduct the system within the estimated budget.

Efficiency in the Classroom.

An interesting efficiency system involving the adaptation of modern factory systems to the work of the classrooms was recently conducted at Bay City, Mich., under the direction of Supt. F. A. Gause. The plan which is believed to be the first of its kind in the United States was carried out by three substitute teachers working under the supervision of the superintendent. Six tests were made covering the work of students from the fourth to the eighth grades inclusive, which involved the examination of about fifty thousand papers.

At each test, the records of the respective classes in the school were marked, in addition to the records of the remaining grade buildings. The first test showed an average of 80 per cent or an improvement of 31 per cent. In the first test a difference of 31 per cent was shown between the lowest and highest schools. This has since been decreased. The second test showed a difference of 27 per cent, the third 25 per cent, the fourth 27 per cent, the fifth 15 per cent and the sixth 10 per cent.

The figures show that there has been marked improvement in the uniformity of the quality of work and the kind of subject matter covered by the classes.

The system made it possible for the superintendent to locate the strong and weak points in the schools. It opened before the teachers places where teaching was poor or inadequate, and it gave them an opportunity to compare their work with that of teachers in the same grade of other buildings. Principals of schools were able to see the relative standings of the respective buildings as well as their own, and to confer with the teachers on the information given.

As a final result, the principals were able with their teachers, to plan ways and means for overcoming weaknesses and to give special attention to the elimination of defects in teaching or supervision.

The system is similar to that in use in factory and commercial establishments and offers a method of determining where the city's money is being invested to best advantage, and where the results are not commensurate with the expenditures.

Wilmington's Business Methods Criticised.

The special investigating committee of the chamber of commerce, Wilmington, Del., in a rather extended report, has just made public the results of an audit of the school accounts. The audit was made by a public accountant and sought to establish a basis upon which to present to the city authorities its request for the annual school appropriation. The committee shows that altho no evidence of misappropriation of funds or graft can be charged against the board, the work of the business office has been conducted in a loose, slipshod manner entirely at variance with accepted school board methods. In brief, the committee found the following evidences of poor business: Incomplete bookkeeping; lack of a budget and a definite limit for expenditures; laxity in the control of janitors and lack of system in hiring of assistants; poor bookkeeping; prices of textbooks are ten per cent higher than those paid in Philadelphia; board does not solicit bids from outside firms.

Illinois School Board to Meet.

The Illinois State School Board Association will hold its annual meeting November 22 to 24, at Champaign. President A. D. Welsh of Rock Island will give an address; Mr. R. G. Jones, superintendent of schools, Rockford, will speak on Standardizing Salaries of Teachers; Mr. Charles A. Prosser of Minneapolis, Minn., will speak on The Gary System of Schools.

On Thursday morning, November 24th, there will be a discussion of administrative business organization led by Mr. Brown of Rockford. In the evening, Mr. F. E. Williamson of Urbana will discuss The Proposed School Legislation.

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The bubbler itself is the same construction as we employ in our bubblers for use on city pressure. It is absolutely sanitary and germ-proof. Users' lips can not touch the jet. The small bowl that prevents contact between lips and jet is in turn kept germ-proof by splashing from the jet.

The self-closing stop-cock has our celebrated ball-bearing mechanism—GUARANTEED FOR FIVE YEARS.

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The stand is made of angle iron, enameled white.

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Building and Finance

ST. LOUIS NEEDS SCHOOL BUILDINGS.

A partial report on the survey of the St. Louis schools has been submitted in the form of a letter by Charles H. Judd, director of the survey. Dr. Judd, in his brief report, emphasizes the need of additional school buildings but offers no solution for the problem of finances.

In making his preliminary report, Dr. Judd says that so far as the results of the investigation indicate, it is clear that the classroom work and the general organization are of a high standard. Economies which will yield sufficient funds for building have not been located and there is no possible contraction in the school work which will give the necessary funds.

The report suggests that buildings in the past might possibly have been erected at slightly lower cost, but they would have lacked certain advantages which are exhibited in present structures. It is clear to the survey experts that economy in future building operations will not relieve the situation to any great extent. What is needed is an adequate building fund to take care of all present and future building needs, without curtailing in any way the work of other departments of the system.

Unit Schools in Pueblo, Colorado.

A pamphlet on the advantages of the unit schools as erected and conducted in Pueblo, Colo., has just been issued under the direction of Dr. R. W. Corwin.

The pamphlet contains four pages devoted to floor plans and type matter relative to typical one-story, unit schools.

The advantages claimed for the buildings are that they provide the necessary rooms for immediate needs, at a very low cost; that they do away with stairs and hallways, making a sav-

ing in operating expense and janitor work and promoting the health of the pupils; that they offer less opportunity for the spread of contagious diseases; that the dangers of fire and panic are reduced to a minimum; that noise and distraction from moving classes is eliminated; that discipline and supervision of rooms and grounds is made easy; that adequate diffused lighting is possible thru the use of high windows, and more room is provided for blackboard space and wall decorations; that adequate fresh air is provided without drafts; that heating of two kinds is possible, direct heat by jacketed stoves or indirect by heating pipes run from a central building.

The pamphlet shows exterior and interior views of the Edison School, together with the ground floor plan.

ONE-STORY SCHOOLS.

Interest in the planning, arrangement and equipment of one-story school buildings continues to grow apace. Not less than fifty communities in various sections of the country will erect one-story buildings during the present summer.

For the benefit of school authorities who are still studying the problem, the following incomplete list of recent one-story schoolhouses has been compiled. It will be noticed that the list is subdivided according to five classifications, each denoting a leading idea which has been worked out in the respective buildings. Many of the buildings might properly be grouped under two and some under three headings.

California Type.

Dewey School, Oakland, Cal.
Santa Fe School, Oakland, Cal.

Claremont School, Claremont, Cal.
Emerson School, Oakland, Cal.
Lockwood School, Oakland, Cal.
Jefferson School, Oakland, Cal.
Tipton High School, Tipton, Cal. (mission).
Grammar School, Cienago, Cal. (mission).
High School, Fresno, Cal. (mission).
Bakersfield, Cal.
Lincoln, Cal.
Orland, Cal.
San Jacinto, Cal.
Venice, Cal., Union High School.
Coronado, Cal.
Garvey Avenue School, Alhambra, Cal.
Grammar School, Glendora, Cal.
High School, Monterey, Cal.
Homestead School, San Mateo, Cal.
Anchorage, Ky.
Reno, Nev.

Social Center Type.

Whittier School, Whittier, Cal. (Mission).
Lincolnwood School, Evanston, Ill.
Joseph Sears School, Kenilworth, Ill.
School, Cassopolis, Mich.
Gregory School, West Orange, N. J.
Grammar School, Rosemont, Pa.
School, Osseo, Wis.

Top-Lighted.

Elm Street School, River Forest, Ill.
Westfield, Mass.
Greenfield, Mass.
Groton, Mass.
West Mansfield, Mass.
Monson, Mass.
Holly, Mich.
Hendrick Hudson School No. 28, Rochester, N. Y.
Nathaniel Hawthorne School, Rochester, N. Y.
Ellwanger-Barry School, Rochester, N. Y.
Mark Twain School, Kansas City, Mo.
Bancroft School, Sioux Falls, S. D.
Lincoln School, Sioux Falls, S. D.
Longfellow School, Sioux Falls, S. D.
Windsor, Vt.

Cottage Type.

Bauxite, Ark. (sawtooth roof).
Liller School, Colorado Springs, Colo.
Buena Vista School, Colorado Springs, Colo.

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Hayden Heights School, St. Paul, Minn.
Galtier School, St. Paul, Minn.
Homecroft School, St. Paul, Minn.
Randolph Heights School, St. Paul, Minn.
Jewish Technical School for Boys, Pleasantville, N. J.
New York Parental School for Boys, Flushing, L. I.
Favorite Hill School, Piqua, O.
Fulton Park School, Portland, Ore.

One-Story—Plain.

Courtland School, Courtland, Cal.
Parker School, San Diego, Cal.
Jackson School, Fresno, Cal.
Grammar School, Modesto, Cal.
Grammar School, Chino, Cal.
Huntington Beach, Cal.
Artesia, Cal.
Hester, Cal.
Hermosa Beach, Cal.
Marengo Primary School, Alhambra, Cal.
Fremont Avenue School, Alhambra, Cal.
District School, Glen County, Cal.
Grammar School, Burlingame, Cal.
Grammar School, North Stockton, Cal.
Lincoln Primary School, Petaluma, Cal.
L. T. Stone School, Galesburg, Ill.
Lincoln School, Edwardsville, Ill.
Glencoe, Ill.
Jessie Spaulding School for Crippled Children, Chicago, Ill.
Wayne, Ind.
East Side School, Great Bend, Kans.
Chamberlain School, Auburn, Me.
Page Memorial Kindergarten, Wellesley, Mass.
School, Brewster, Mass.
Pond End School, Waltham, Mass.
Lincoln Park School, Waltham, Mass.
Middleboro, Mass.
Kloman School, Menominee County, Menominee, Mich.
Hiawatha School, Minneapolis, Minn.
Columbus, N. J.
Primary School, Collingswood, N. J.
Cheshire School, East Bloomfield, N. Y.
Warner, N. D.
School, Gaston, Ore.
St. Helen's Hall Kindergarten, Portland, Ore.

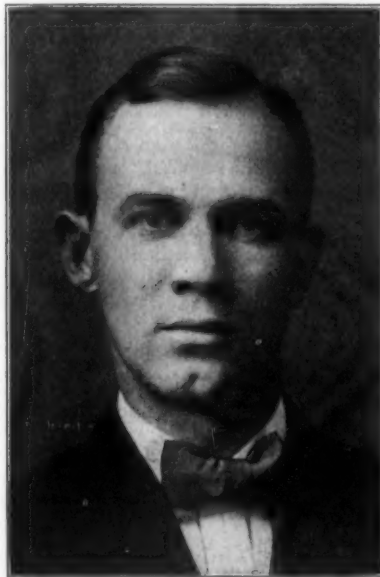
School, Pearsall, Tex.
School Dist. No. 178, Spokane County, Wash.
District School, Fox Point, Milwaukee Co., Wis.

BUILDING AND FINANCE.

A report recently submitted to the Philadelphia board of education thru the Department of Public Health and Charities, shows that 141 out of 331 school buildings are faulty in ventilation, lighting or playground facilities.

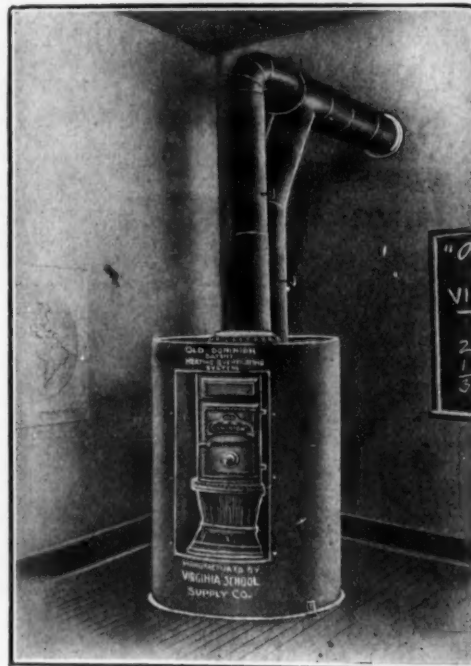
The report indicates that, during twelve months, the conditions in school buildings have been improved less than two per cent. The improvement was made upon the order of the board last June, when the superintendent of buildings was requested to place the schools in condition during the summer vacation.

The report points out that, in addition to in-



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adequate lighting and ventilation, there have been added the evils of part-time sessions and overcrowded classes which tend to affect the health of hundreds of children.

Indianapolis, Ind. Plans have been outlined for a uniform building program for school properties to be erected by the board on the Technical Institute grounds. It is the aim of the board to prevent the adoption of any wild building scheme. On the other hand, an effort will be made to lay down obligations which must be followed by future boards. A general program for the location of buildings and dimensions, and other essential features of the structures which should obtain for many years, will be provided for.

In the plans for the Central Library Building, three local architects and three from outside the city competed. This plan will be followed with the remaining buildings if the building program is adopted.

The board has \$150,000 available for high school and \$250,000 for trade school purposes which will be held in reserve for the present.

Philadelphia, Pa. A complete revolution in the construction and architecture of public school buildings is planned by the board. The department of buildings has begun work on plans for the first of a series of one-story school buildings for the Quaker City.

The building which will be erected at Ann and Tulip Streets, calls for a structure of 32 divisions. There will be no basement, except the space for a heating plant. Skylights in the roof will offer adequate lighting, while the space usually given to stairways will be utilized for classrooms. Ample provision will be made for a playground and complete equipment for all educational and administrative needs will be included. It is estimated the building will cost about \$125,000.

Supt. Charles S. Jackson of Lynn, Mass., has proposed that the city adopt the plan of anticipating its schoolhouse needs and lay aside a sum each year, from the tax levy, for the erection of new school buildings. In a discussion of the building problem, Mr. Jackson has claimed that a pay-as-you-go policy would be more economical than the present method of issuing long time bonds.

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School Hygiene Notes

DEFECTIVES IN RURAL SCHOOLS.

Children in rural schools are more defective and in need of medical inspection than children in the cities, according to Dr. Thomas Wood, of Columbia University, who has made a wide study of the subject.

Dr. Wood's conclusions are borne out by a recent examination of 397 children in a rural township of New York state. The results of this examination are reported thus in the Health News of the State Department of Health:

The health officer of one rural township being appointed medical inspector of all the schools in the township, and being instructed by the boards of trustees to make a thoro examination of all children to determine accurately the health needs of the children in that township engaged a competent medical assistant and together they carefully examined all children not examined by private physicians. The result of the examination of 397 children is as follows:

Examination of School Children in a Rural District in New York State.

Defects of Teeth.....	51.3%
Tonsils or Adenoids	61.5%
Enlarged Glands	30%
Vision	18.6%
Anemic	10%
Tubercular	7.2%
Pretubercular	6%
Skin Disease	5%
Spinal Deformity	3.2%
Normal	2.55%
Defective Hearing	2%
Mentally Defective	2%
Hernia	1%

Also were found—
Pediculosis—2 cases
Epilepsy—1 case

Undersized—2 cases

Unvaccinated—65 cases

Comparing these results with the results of the inquiry made by the State Department of Health, it is noted that defects of the mouth and nasal cavity were present in more than half of the children.

It would therefore seem imperative that knowledge be disseminated in rural districts concerning the mischief resulting from the absorption of the decomposition products from decaying teeth, and diseased tonsils, and that clinic and dispensary service be developed within their reach and at cost of maintenance. The health officers in but 20 of the 57 counties of the State report any such service within the limits of their county.

The importance of extending education in oral sanitation among the rural population receives added emphasis from the standpoint of the prevention of communicable disease, for the first lesson to the child in avoiding contagion is to guard the mouth from receiving infection from the mouth of another, and to keep his own mouth and throat in such sanitary condition that the infective agents of communicable disease will not be harbored and permitted to multiply if they are accidentally admitted. Of the health officers in rural districts (there are 1018 rural health officers) 68% are also medical school inspectors. To them in large measure, one-half of the population of the State, outside of Greater New York, must look to develop necessary educational methods and remedial agencies for these and other preventable and curable illness. Will it take the form of a Rural Health Centre?

KEEPING SWIMMING POOLS CLEAN.

"Swimming is gaining an increasing popularity as a wholesome form of physical exercise and relaxation," says a writer in the Journal of the American Medical Association, "and the swim-

ming pool has become an adjunct to all sorts of establishments which promote physical welfare. With the swimming pool have come certain problems of hygiene which tax the ingenuity of those responsible for the sanitary control of the institutions. The possibility of transmitting infectious diseases thru pools has already been referred to in The Journal. Perhaps, as has lately been implied, the danger of infection in swimming pools has been over-emphasized, altho there are recorded reports of the presence of grip, colds, pneumonia, sore throats, etc., among those who have frequented the pools in certain educational institutions.

"Altho the problem of pool disinfection has received considerable attention, there seems still to be not a little discrepancy in the results and lack of agreement as to the ideal procedure for securing entirely satisfactory sanitary conditions. Levine, of the Iowa State College at Ames, regarding the swimming tank as a 'potential vehicle of infection,' has reinvestigated various suggested methods and compared their efficiency. He clearly points out that the use of chlorin, as it is applied in the familiar routine with bleaching powder, has not solved the question of the sanitary control of swimming pools as it has that of water supplies for drinking purposes. A water supply after treatment is protected against repollution. A swimming pool is constantly receiving pollution and should therefore constantly be disinfected.

"It has been pointed out by Roberts that, in addition to continuous disinfection, an occasional complete sterilization of swimming pools would be advantageous. Copper sulphate, free chlorin and 'bleach' have been recommended, the latter being most commonly employed. The hypochlorite process is doubtless excellent for its purpose; but the rapid decomposition of the bleaching powder, its irritant effect on the eyes, and other reputed objectionable features tend to eliminate this chemical for use in any continuous disinfection process. Levine has found that continuous filtration may effect a very considerable reduction in the bacterial count of swimming pools; but this is not enough to maintain them in sanitary condition. Filtration should therefore be supplemented with disinfection. Altho

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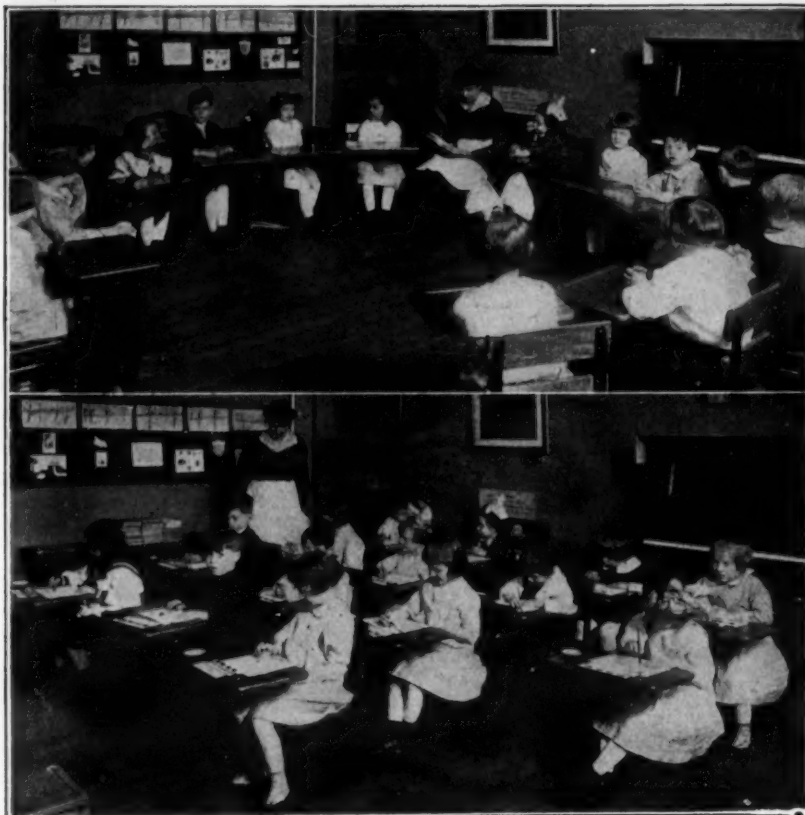
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calcium hypochlorite may advantageously be used at intervals, Levine returns to the recommendation of copper sulphate in this field. It is cheap, it has no irritating effect, and its disinfectant action is slower and consequently more applicable to continuous disinfection, than that of hypochlorite. If it is added just prior to the opening of the pool for use the maximal efficiency of the copper salt will be exerted during the period of maximal pollution.

"The acceptance of some dependable standard method of pool disinfection which could be readily applied by persons without technical training in the swimming tank, which are becoming yearly more numerous and popular, would advance the cause of the public health. Doubtless the time will come when a sanitary standard will be recognized for plunges as it is for various other situations which concern the hygienic welfare of the individual. Meanwhile it may be helpful to report the latest contribution to the subject. According to the Iowa experiments, filtrations supplemented by disinfection with one part per million of copper sulphate three times a week and, if desired, an occasional sterilization with calcium hypochlorite, will keep a swimming tank in good sanitary condition for several months."

SCHOOL HYGIENE NOTES.

The National Association for the Study and Prevention of Tuberculosis has recently issued a directory which lists 3,100 agencies engaged in the fight against tuberculosis in the United States. The movement has increased 1,600 per cent in twelve years. The new directory includes 310 open air schools for tubercular children and for children who are inclined toward tuberculosis.

San Francisco, Cal. The board has established a dental clinic, with two dentists and a lady assistant in charge. An appropriation of \$3,000 has been made to meet the expenses.

A tuberculosis survey of Michigan conducted by the State Board of Health, shows that the Wolverine state is not far behind other states in the matter of establishing open-air schools for tubercular children. Information obtained from other states, and statistics collected in the survey, show that Michigan has more of these schools than any other state in the group made up of Michigan, Wisconsin, Illinois, Indiana and Ohio.

In the state of Michigan alone there are at present 22 open-air schools either in operation or about to be put into operation. There are only two schools in Illinois, outside of Chicago; in Wisconsin there are four or five outside of the city of Milwaukee; in Indiana and Ohio there are comparatively few of them.

The largest number of schools in Michigan is in the city of Grand Rapids, which has seven. In Detroit there are three, in Battle Creek three, in Kalamazoo two, and one each in Lansing, Ypsilanti and Menominee. Port Huron, Flint and Albion expect to have schools established in the near future.

The State Board of Health has for its aim a sufficient number of open-air schools to give every child in ill health an opportunity to enroll in one of these institutions. The statistics show that nearly seven thousand children are in need of such a school where they may obtain physical as well as mental vigor.

Duluth, Minn. The board has established a dental clinic for school children. An appropriation of \$50 per month has been made to cover the expenses. The work is to be done by the members of the local dentists' society. The board has also established two additional open-air schools and one deaf and dumb school.

Boise, Ida. A recent report of the receipts and expenditures of the high school cafeteria shows a cash balance of \$58.30 in favor of the school. It is planned to reduce the prices of food during the next year. The planning and preparation of the lunches is done by the students of the cooking classes who are taught the principles of buying in quantities, menu making and lunch-room accounting.

The Massachusetts Commission for the Blind, in its recent annual report, declares that at least one-tenth of one per cent of the school children in the state require special instruction in classes for defective sight. Special studies conducted in Springfield, Worcester, New Bedford, Lynn and Cambridge show a distinct need for these

classes. In Worcester alone, the Commission found 125 children in the second grade who have one-half or less than normal vision. Special classes are recommended for thirteen children. In New Bedford there are 33 children who are in need of special instruction, while Cambridge has twenty. The Commission estimates that if the percentage of .17 holds throughout the state, there are at least 650 children of this class who need such instruction. The Commission finds that one city, Springfield, has established a special class for children with defective sight.

Boston, Mass. The board has approved a report of the Department of Physical Education, providing for a series of athletic tests. The tests are intended to develop a method for extending the benefits of sound physical culture to all the school children.

Easton, Mass. The board has ordered that the Department of Medical Inspection pay special attention to the kindergarten and the lower grades in connection with the inspection of children's teeth. It is recommended that the Department co-operate, so far as possible, with the various dispensaries in this work.

According to Dr. Martha Tracy of the Women's Medical College of Pennsylvania, approximately seventy per cent of the Philadelphia school girls are underfed.

Philadelphia, Pa. The Department of Medical Inspection has asked the board for 46 additional health inspectors to care for the 200,000 school children. The cost of the additional inspectors will be \$30,000 per year. The department bases its request on the good work which it has been able to do in removing defects which interfere with school work.

A series of tests conducted by Dr. Tracy at the Philadelphia Normal School for Girls shows that there is a distinct difference in the powers of endurance and vitality of the 127 girls selected for study. According to Dr. Tracy, an examination of the diet of these students shows that about one-third of the girls are in the habit of taking three substantial meals a day. The remainder depend largely upon hastily snatched breakfasts and lunches and upon sweets and pastry.

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THE CONFERENCE OF MASSACHUSETTS SUPERINTENDENTS.

The second annual conference of Massachusetts School Superintendents held June 27-30 at Cambridge, showed a healthy growth in attendance and professional interest.

Dr. David Snedden who delivered the opening address on Tuesday morning, spoke on "General Policies Underlying Methods of School Administration."

Following a review of present conditions, Dr. Snedden said in part: "In my opinion we shall have to specialize and develop the office of supervisor of instruction on the basis of horizontal levels. We shall require in every school system, a supervisor of elementary grades and a supervisor of secondary instruction."

Mrs. Ella Lyman Cabot who followed Dr. Snedden, spoke on "Improvement of School Administration." The remainder of the morning was devoted to a conference of superintendents and high school principals, led by Dr. Thomas M. Balliet of New York University. Dr. Balliet spoke on the efficiency of the superintendent, emphasizing the need of definite authority in the selection of teachers. He showed that the schools are judged by the work of the teachers in the classroom. Dr. Balliet made a strong plea for a large group of outside teachers in the teaching corps. The reason for this, he said, is that it is easy to get rid of outside teachers while in the case of local instructors, pressure is often brought to bear to retain them.

The afternoon session which was given to departmental discussions of various phases of school work, was divided into conferences for board members, city superintendents in non-union towns, union superintendents and high school principals. The meeting for board members was led by Albert L. Wales of Groveland. E. C. Baldwin, Agent of the State Board of Education, and Dr. M. E. Davenport of Beverly, spoke. "Measuring the Efficiency of the Superintendent" was discussed by U. E. Mahew of West Tisbury and F. G. Wadsworth, State Agent of the Board. Mr. Wadsworth said there are two scales by which the superintendent can be measured—his ability as an administrator of education and his ability to supervise education. There

must be a strict division of authority with rules defining the duties of the board and the superintendent, so that the superintendent may know what is expected of him and the things for which he must be held accountable. Mr. Wadsworth held that in making the superintendent responsible for certain lines of work, he should be given authority to carry out his ideas and be accorded the support of the board. He should be free to select the teachers who are to carry out his ideas in the classrooms.

In the evening, Dr. Snedden addressed the general conference, taking for his subject the new department of educational sociology which he is to organize and direct at Teachers College. Dr. Snedden emphasized particularly that educators engaged in reformation measures in education need to be supported in the future by definite information. The new department is intended for those who must plan and organize the work of the schools. In the opinion of Dr. Snedden, the study will form the basis for future progressive measures in school administration.

Mr. Wm. Orr who addressed the meeting on the subject of "Team Play Within the Administrative System" said it is essential that there should be co-operation in the work of the schools. The powers, duties and responsibilities of each unit must be clearly defined and set forth in the printed rules of the board. Speaking further, Mr. Orr said in part:

"Another condition making for team play is that the superintendent, the high school principal and the school board shall have in mind a definite plan of work, and shall provide abundant opportunity for each member in the system to use his time and energies to advantage." Above personal friendship and sympathy and loyalty on the part of the subordinate and his chief, Mr. Orr placed loyalty to the cause of public education. He urged that sources of inspiration be provided from time to time so that the membership of the system may be lifted above the petty routine and be given an understanding of the great ideals of the school system.

At the Friday afternoon session, the special committee appointed a year ago to study the annual reports of city superintendents, presented its recommendations concerning the same.

SCHOOL ADMINISTRATION NOTES.

Freeport, Ill. The board has abolished final examinations in the high school. Emphasis is to be placed on written tests which will be given not less than once every six weeks.

Benton Harbor, Mich., spent \$96,000 for the operation of the schools during the past year.

Lynn, Mass. A number of summer schools were conducted during July and August for the benefit of backward students. The enrollment reached five hundred.

Marlboro, Mass. A six weeks' summer school was conducted during July and August.

Portsmouth, N. H. The board has ordered that the departmental plan of organization be introduced in the Whipple School. A radical change is not intended by the board but the plan will be carried out as far as is practical at the present time.

Columbus, O. Under the direction of Supt. John H. Francis, the junior high school system is to be introduced in the schools. Two buildings, the Fifth Avenue School and Clinton High School, have been designated as Junior High Schools. In these, the seventh and eighth-grade pupils and the first-year classes of the high schools will be concentrated, with the remaining grades distributed among the neighboring schools.

The California Industrial Accident Commission has rendered a decision to the effect that Miss Julia R. McCord, a school teacher, met her death while acting under orders from the superintendent of schools, and that the Oakland board of education must pay her sister \$3,600 at the rate of \$15 per week. Miss McCord who taught school in Oakland, met death in February last, when she was struck by an automobile as she was on her way to a course of lectures.

Brookline, Mass. The committeemen, at a recent town meeting, voted an appropriation of \$5,000 for a survey of the public school system. The survey is intended to give definite information to the citizens on the matter of per pupil cost for instruction. The results will determine finally, whether the town is paying too much for the instruction of school children.

Leominster, Mass. A summer school has been opened in the Field school.

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EVENING SCHOOL EXPENDITURES IN THE LARGE CITIES.

The United States Bureau of Education has issued a report on the evening school expenditures of 21 leading cities of the country. The statistics which were compiled in response to numerous requests, give a list of the cities arranged according to per capita expenditures, on the basis of population. The majority of the figures represent the expenditures for 1914-15; those for Seattle are for 1915-16.

The table is reproduced below.

Evening-school expenditures of the twenty-one* leading cities of the United States arranged in order of their per capita expenditures on the basis of total population.

U. S. Census Estimate, 1915				
Cities	Popula- tion	Rank	Expenditure Amount	Per Capita
Newark	389,106	15	\$172,291	\$0.443
Los Angeles...	452,140	12*	120,380	.266
Buffalo	457,723	10*	111,000	.242
Pittsburgh ...	564,878	8	105,000	.186
New York	5,333,539	1	926,215	.174
Kansas City...	284,567	21	40,000	.141
Detroit	546,183	9	65,000	.119
Chicago	2,397,600	2	244,744	.102
St. Louis	737,497	4	75,000	.102
Seattle	313,029	19	30,000	.096
Cleveland	639,431	6	58,819	.092
Cincinnati ...	402,175	14	35,504	.088
Boston	734,747	5	63,000	.086
Minneapolis ..	343,466	18	27,154	.079
Philadelphia ..	1,657,810	3	121,202	.073
New Orleans...	361,221	16	22,405	.061
Jersey City ...	293,403	20	17,661	.06
Milwaukee ...	419,589	13	24,000	.057
Washington ...	356,028	17	20,000	.056
Baltimore	579,590	7	22,755	.039

*San Francisco, ranking 11 in population, has filed no report of its expenditures.

Altho the figures do not have any necessary connection with the efficiency of the work accomplished, and the conditions in the cities vary, the per capita expenditure on evening schools, gives to some extent, the community interest in the work.

A comparison of the amounts expended by

specific cities shows wide differences; for instance, the per capita figures in Newark and Jersey City; in Pittsburgh, Baltimore and Detroit; in St. Louis and Boston.

As a fitting conclusion of the study, the question might rightfully be asked: What consideration has been given to the problem of Americanizing the foreigner in the formulation of these evening school budgets?

TEACHERS AND ADMINISTRATION.

Worcester, Mass. Upon the recommendation of Supt. H. P. Lewis, the committee on teachers has approved the establishment of a sabbatical year for the teaching corps. Under the plan, each teacher is to be allowed a leave of absence on half pay. Such teacher must use the period of absence in study, travel or some other manner which will increase his or her efficiency and value to the schools.

Milwaukee, Wis. The joint committee on rules and finance has approved a proposed salary schedule for principals and administrative heads of the schools. The schedule provides the following salaries:

Principals in buildings of seven rooms or less, \$1,260 for the first year, with increases of \$60 until the maximum of \$1,380 is reached. Principals in buildings of eight to sixteen rooms exclusive, \$1,420 per annum for the first year with annual increases of \$60 until the maximum of \$2,100 is reached. Principals in buildings of more than sixteen rooms, \$2,160 per annum for the first year, with annual increases of \$60 until the maximum of \$2,700 is reached.

It is provided that principals who have been in service five years or more may receive increases of \$60 for each year of service, not to exceed \$300, beginning with September first. Principals whose building classification permits, may receive increases of \$60, beginning September first, until the maximum is reached.

The schedule provides for increases in the salaries of assistant superintendents ranging from \$3,200 to \$3,720. All of the principals of high schools, with the exception of the Bay View High, will receive increases ranging from \$3,000 to \$3,120. The principal of the latter school will be given \$2,760.

A summer school for newly appointed teachers has been opened at Ocean City, Md. The school meets the needs of teachers who are required under a state law to attend an approved summer school for not less than six weeks. A library of reference books is offered and free lectures are given once each week.

Santa Ana, Cal. The board has adopted a resolution requiring that teachers employed in the schools must devote their whole attention to the classes which they teach. They may not take outside work except during the vacation periods.

Marion, O. The board has adopted a standard schedule of wages for high school teachers based upon merit and length of service. The schedule, which is subject to revision, provides for the following salaries and qualifications:

The minimum salary for women teachers will be \$80 per month, with increases of \$5 until the maximum of \$115 per month is reached. The minimum salary for men will be \$90 per month, with increases of \$5 until the maximum of \$140 per month is reached.

Increases for men and women teachers are based upon the following conditions: For rapid growth as a teacher and for a marked degree of success in teaching, an increase of \$10 per month will be given up to a maximum of \$95 for women and \$120 for men. Such increases will be given upon the recommendation of the superintendent and the approval of the board.

Each and every increase in salary is conditional upon the co-operative and progressive spirit of the teacher and the growth made in efficiency. No teacher may be advanced to the maximum who does not meet the requirements for high schools specified by the North Central Association of Colleges and Secondary Schools.

Teachers with leave of absence attending a university, and pursuing courses in work which they are employed to teach, will receive the same increase which they would have received had they continued teaching.

Teachers who have had successful experience in other school systems may be assigned by the superintendent with the approval of the board to positions in the schedule which their experience and qualifications demand.



EIGHT-DRAWER PHYSICAL LABORATORY TABLE



No. 5 FOUR-PUPIL 16-DRAWER SEWING TABLE

The Last Minute is the Most Expensive Time to Buy

WE HAVE GONE THE LIMIT IN PREPAREDNESS. Prompt orders will get prompt shipment from our immense completed stock. Manual Training Equipment shown in catalog No. 14; Domestic Science and Laboratory in catalog No. 15.

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The Bemis Standard Benches and Vises



*A Right Bench at Right Price
Look at Vise*

CATALOG WILL INTEREST YOU

A. L. BEMIS 72 Commercial Street
WORCESTER, MASS.



A CORRECTION.

In the July issue of this publication our Advertising Department thru the transposition of a period advertised the Tirrill Equalizing Gas Machine at \$2.75 and up, according to size.

This was, of course, an error in view of the fact that the price of the Tirrill Equalizing Gas Machine is \$275.00, the price varying of course for the size of equipment.

The Tirrill Machine is a good producing machine which may be used for cooking, heating or lighting and is especially adapted for use in chemistry, physics laboratories, manual training and domestic science departments, etc.

Full information about the machine may be had from the Tirrill Gas Machine Lighting Company whose address is 103-C Park Ave., New York City.

ORGANIZE SELLING COMPANY.

The Pennsylvania Slate Quarriers, who during the past few years have been co-operating to improve the conditions of slate blackboard have just announced a new selling company known as the Natural Slate Blackboard Company.

The plans of the Natural Slate Blackboard Company include several splendid improvements in the matter of the marketing of slate blackboards to schools. Heretofore, very unsatisfactory conditions have existed which have been commented upon very unfavorably.

The Pennsylvania Slate Blackboard is now recognized as practically the finest slate blackboard in the world and one of the great opportunities of the Natural Slate Blackboard Company is now opening up in the export market.

There is no question but what this new com-

pany devoted entirely to the problem of merchandising schools, should build up a service equal to none in the history of the slate blackboard business. Practically 3,000,000 square feet of slate blackboard will be marketed by the company every year assuring school boards prompt shipments at all times with a minimum of delay in transit and absolutely no delay in the quarrying or shipping of the board.

McCONNELL MOVES.

The McConnell School Supply Company which for many years was located at Philadelphia has just removed its factory and main office to 334 S. Clinton Street, Chicago, Illinois.

The McConnell School Supply Company was founded by James McConnell and has been conducted by its founder at 4430 Market Street for many years.

The company makes a very extensive line of school maps together with some special charts, etc., which are retailed thru the regular school supply trade.

The company is just announcing a new map of Illinois and Missouri which should prove of interest to the people of the country.

THE "UNI-FLO"—THE NEW RURAL DRINKING FOUNTAIN.

As the result of many years of experimenting and a thoro study of sanitary drinking fountains, the Glauber Brass Mfg. Company of Cleveland, has placed a new rural drinking fountain on the market called the "Uni-flo."

The new fountain meets every practical requirement of a school bubbler from the standpoints of economy, hygiene, portability and durability. It is wholly boy proof.

This fixture consists of two tanks made of vitrified china. The lower one holding only about a gallon of water, is the pressure tank. An automatic valve feeds water from the upper to the lower tanks as the bubbler is used, thus delivering a bubble of uniform height, regardless of whether the tank is full or nearly empty. The bubbler is absolutely sanitary and germ-proof as the users' lips cannot touch the jet. The stand is made of angle iron, enameled white.

In addition to the new bubbler for country

schools mentioned above, the Glauber Brass Mfg. Company offers a complete line of sanitary bubblers for city schools.

School authorities and others desiring further information, should address the Glauber Brass Mfg. Company, at Cleveland, Ohio.

NEW EBINGER CATALOG.

The name "Ebinger" has become a household word in thousands of schoolhouses, as is well demonstrated by the new catalog issued by the D. A. Ebinger Sanitary Mfg. Company during the past month.

The catalog takes up in detail the several types and styles of Ebinger ventilated urinals, closets, sanitary drinking fountains, lavatories and wash sinks, showers and accessories. A particularly important chapter is devoted to the subject of toilet room ventilation. Plans are given for especially good arrangements of school toilet rooms and for the ventilation of the same.

Both school authorities and school architects will find the catalog of particular value in arranging for sanitary equipment of new schoolhouses. Each of the fixtures shown is not only illustrated and described but full details, drawings of installations and specifications are included.

Copies of the catalog will be sent to any reader of the JOURNAL who may address the D. A. Ebinger Sanitary Mfg. Co., Columbus, O.

VICTOR RECORDS FOR ENGLISH LITERATURE.

The Victor Talking Machine Co., of Camden, N. J., has just issued a list of Victor records based on the works of English and American authors. The list which is arranged in alphabetical form, includes records of lyrics and readings from the authors' works.

The list includes selections from Browning, Dickens, Burns, Dryden, Dunbar, Field, Harte, Henry, Holland, Holmes, Hunt, Jefferson, Johnson, Kingsley, Kipling, Lanier, Lincoln, Longfellow, Markham, Milton, Moore, Poe, Proctor, Thomas Read, and Riley. There are also a number of readings from various poets, selections from Shakespeare's works, Old English Dances, Stories, Fables and Folk Tales for Children, and old Troubadour songs.

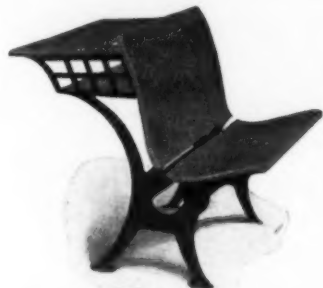
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Unequaled in quality, design and sanitary features.



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One of the best desks of this type made. Fully guaranteed.



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Showing sliding top box.



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Five-ply veneers, semi-steel standards. We have chairs for any auditorium.



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Made with fixed, lifting lid or sliding top boxes, in six sizes.

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Separate Desks and Settees
Single Pedestal (St. Louis Type) Desks
Commercial Desks
Movable Study Desks and Chairs
Tablet Arm Chairs and Settees
Auditorium Seating--Fixed and Portable

Desks are made with Tubular Steel and Semi-Steel standards; with open front, lifting lid and sliding top boxes. All desks made in three to six sizes; correctly designed and proportioned to provide proper seating under all conditions, for every purpose.

Chairs are made with Tubular Steel and Semi-Steel standards; 5-ply veneer or slat backs and seats, in birch or oak in colors desired.

To save you freight and to insure quick deliveries a large stock of desks is carried in our representatives' warehouses in Cleveland, O., Minneapolis, Minn., Kansas City, Mo., Dallas, Houston and Longview, Tex., Ft. Smith, Ark. and New Orleans, La., as well as at factory.

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CLEVELAND SEATING. CO. Cleveland, Ohio.	Del., Md., Pa., W. Va., D. C., So. N. J., Western N. Y., Ky., Ohio, Ind., Mich. east of Grand Rapids.
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SUPERIOR SEATING CO. Kansas City, Mo.	Kans., Nebr., Mo., Colo., Utah, So. Ia., Ariz., New Mex., North Western Okla.
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The constantly advancing prices of material and labor have forced an increase in price of school furniture. Further advances will be necessary if present conditions continue. You will save money and insure having the furniture when needed by ordering NOW. Do not wait until the last minute.

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No. 34 Adjustable Desk.
One of the best desks made. Designed for use with No. 29.



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A companion desk to No. 64.



Superior Study Top Desk.
Made also 26 in. high with level top, for use as a typewriter desk. Very desirable for that purpose.



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One of several popular patterns.



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Unsurpassed for use in auditoriums which are also used for classroom purposes.

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specified as a standard for quality insures adjustment and mobility in apparatus as required for Public School work. Our Catalog K shows the exclusive features of our construction.

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DALLAS, TEXAS HIGH SCHOOLS

have selected Medart Steel Lockers and Gymnasium Equipment for both of their magnificent new buildings.

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FINISH OIL PAINT CONTAINING NO WHITE LEAD

**Egshelcote Beautifies the Interior Walls
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USED NATIONALLY IN SCHOOLS
WITH SATISFACTORY RESULTS

FREE TRIAL — A sufficient quantity to make a thoro test
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WRITE FOR DETAILED INFORMATION AND COLOR SUGGESTIONS

PATEK BROTHERS SOLE MAKERS **MILWAUKEE**

A COMMUNITY SCHOOL BUILDING.

(Concluded from Page 29)

studies of the board combined with suggestions received from the leaders in the community's activities, finally led to the planning and erection of the present complete building which is the first of its kind, so far as can be learned, in the United States.

The building which was completed in December, 1915, and occupied in February, 1916, is three stories high and is 130 feet long and 60 feet wide. It is built of brick and, while not fireproof, is very substantial and entirely safe. The ground floor which is slightly below the street level provides space for the farm bureau office, boys' and girls' locker rooms, a storage room and the auditorium.

The auditorium is 60 feet by 70 feet and, with the gallery, accommodates about 1,500 persons. The ceiling which is 19 feet high, takes in two floors so that practically all the space on the second floor is occupied by the auditorium. The seats are removable so that the room may be used interchangeably for community or gymnasium purposes.

The stage which is 25 feet by 40 feet has been equipped at an expense of \$985 with scenery for all kinds of entertainments, amateur theatricals and other social center features. There is also a motion picture and stereopticon machine for entertainment and educational purposes. The remaining space on the second floor is given to an agricultural laboratory and to a community library and ladies' rest room. The last mentioned room is equipped with wall bookcases, reading table, writing desks, easy chairs and a couch. A private lavatory and toilet are provided for the use of patrons. A matron is employed to take care of the room and to meet

farmers' wives and daughters when visiting the building.

On the third floor are located the industrial departments of the school. These include a sewing room, a cooking room, a commercial department, a draughting room, boys' and girls' toilets, a manual training room, stock room and dressing rooms, and the stage loft. At the extreme front of the floor there is a glass conservatory for flowers and plants such as are needed for testing by the agricultural department or, the county farm agent.

The building in actual use, meets all demands upon it. The auditorium is used by the school during the day and also on three evenings of each week. The remaining three evenings are for the citizens. Since February, 1916, the school has taken in more than \$2,000 as proceeds from entertainments, plays, contests, etc. An athletic director has been employed to have charge of the gymnasium and playground work. Under his direction a military drill company has been organized and trained.

The total cost of the structure was \$35,000. The general contract was \$22,000, the heating and ventilation \$5,800, the plumbing \$1,800 and the electric wiring \$400. The rest room was furnished thru private subscriptions at a cost of more than \$400. The chairs and scenery were similarly purchased at a cost of \$1,985. In addition the sum of \$4,500 was spent for miscellaneous equipment for the building.

The building was erected under the supervision of the board of education which consists of Mr. Frank W. Murphy, President; Mr. Victor E. Anderson, Secretary; Mr. Albert Olin and Mr. John Lancaster. Associated with the board in working out the special community ideas were Mr. John E. Palmer, superintendent

of schools, Mr. C. O. Saterbak, secretary of the Commercial Club and Mr. Wm. Ringdahl, chairman of the County Board.

Mr. E. F. Broomhall of Duluth, was architect.

THE BUSINESS MAN IN THE PUBLIC SERVICE.

(Continued from Page 21)

masters, for either he will hate the one and love the other, or he will hold to the one and despise the other. You cannot serve God and mammon." So spoke the greatest Teacher of them all, the greatest Teacher the world has ever known.

No father with children in attendance at the public schools, no citizen who loves his country's institutions, no man with red blood in his veins can sit idly by and let conditions as they are go unchallenged. No true businessman who in his private business selects workers with a view of their ability, who advances them for merit and rewards them for loyalty can do other than register his protest when he finds a different and a demoralizing set of standards fixing the selection, the advancement and the reward of servants in that branch of the public service in whose administration he has been chosen to participate. If he has had success in his private business and his success is lasting, it is because he has brought energy, hard work, efficiency and high ideals to it. Competition has been constant and persistent. To success he has had to offer his consumer a better product or his clientele a more attractive service than his competitor. To accomplish this, skilled workers, capable assistants and conscientious lieutenants were required. Pull and outside interference have prevented neither the elimination of the unfit nor the recognition of the competent man or woman in his employ.



Above is shown the High School at Norwood, Ohio—one of the thousands of schools throughout the world equipped with the

JOHNSON SYSTEM Of Temperature Regulation and Humidity Control

The Johnson System increases efficiency in the schoolroom—promotes health and makes it easier to study. No overheated rooms—no wasted heat. No need to raise the windows and let in a draft—the Johnson System keeps

the room at an even temperature and the proper humidity of the air is constantly maintained. Tear out this ad, write your name and address on the margin and a copy of our catalog will be mailed to you.

JOHNSON SERVICE CO., Milwaukee, Wis.

He cannot understand why the same principles and the same course of conduct which he has successfully applied to his private business cannot and should not with equal success be applied to the business of the public schools.

So he undertakes to apply them. Of course, here again his task will be a difficult one. He will be reviled by the press.—Let him remember that the press is not always independent. It has news to sell. Not infrequently, it gives its readers what it thinks they want, instead of what they ought to have.

He will be discouraged by his political sponsors.—Let him remember that success of party, not the best public service, may be their predominant aim.

He will be abused by the "sob-sisters."—Let him remember that they are moved more often by maudlin sentimentalism than by a knowledge of the facts.

He will feel the pressure of public opinion.—Let him remember that too often "public opinion is a controlled opinion" and that the controllers are not always disinterested nor honest.

He will be betrayed even by an associate who may be a businessman with political aspirations, standing in mortal dread of the labor vote.—Let him but strive the harder. His will be the unpopular position. Let him defend it fearlessly. His is the task of helping to introduce sound business management into a vital department of the public service. His is the task of helping to reclaim the profession of teaching and to free it from the baneful influence which threaten to prostitute it to base purposes. It will take of his time. It will be worthy of his best thinking. It will require all of his courage. He may be courting political

oblivion; but withal he is a businessman and he prefers good business to bad politics.

HIGH SCHOOL ADMINISTRATION.

Philadelphia, Pa. Supt. John P. Garber, at a recent meeting of a board, presented a plan for the organization of a series of Junior High Schools. The schools which are planned for operation in September will utilize one building in each district. In these buildings, the pupils from the seventh and eighth grades and the members of the first-year high school classes will be gathered. It is expected that the plan will be effective in solving the problem of school accommodations, of increased and convenient high school facilities, and of constantly improving educational returns.

Sheboygan, Wis. The principal of the high school has recommended that the board introduce a two-session plan in the school during the next year.

Webb City, Mo. The board plans the introduction of a course in military training in the high school.

Haverhill, Mass. William J. Saunders, head of the commercial department of the high school, has issued a report on the work of the school employment bureau. The bureau which was started in February last, has filled 122 positions and has placed 97 pupils. Nineteen pupils were placed twice, three were placed three times, 56 were assigned to stores, seventeen to factories, eighteen to offices, eleven to private families and fifteen to miscellaneous work.

According to Mr. Saunders, some were placed more than once owing to the temporary character of the work. Most of these places were for afternoons and Saturdays. The office positions were filled from the senior class of the commercial department and may be considered as permanent.

Chicago, Ill. The board has adopted a report of the special committee on military training providing for a complete four-year course for all the high schools of the city. The course will be optional and will be under the direction of Supt. John D. Shoop.

In the first and second years of high school,

the work in physical education will be modified to conform to the regulations adopted by the United States Army in respect to facings, alignments, marching, setting up exercises, etc.

First Year—As supplementary to the course of study in physical education the following, under the head of "Tactics":

1. Setting up exercises.
2. Instruction in the School of the Soldier, without arms. Instruction in the elements which produce efficiency in military organization, and necessity of precision, uniformity, and obedience to commands.
3. Instruction in the School of the Squad, without arms. Formation and alignment. Intervals and distances. Assembling and marching. Observation and concentration.
4. Definition of all military terms used. Position and attention, rests, facings, steps, time, marchings, salutes, orders, commands, signals.

Second Year—In the course of study, under the head of "tactics," continue and elaborate military instruction as in first year.

Third and Fourth Years—"Tactics":

1. Instruction in the School of the Company. Organization and alignment, intervals and distances, assembling, marchings and deployment, advancing and attacking.
2. Instruction in the School of the Battalion. Organization and marching, deployment and attacking, advancing and supporting.
3. Definition of military terms used. Instruction in the principles underlying successful team work and leadership. Instruction in hygiene and sanitation in camp and field life.
4. A complete military organization to be effected; squad platoon, battalion, and regiment.
5. Drills and exercises to be carried on in accordance with the United States drill regulations and physical exercise manual.
6. Military sports, athletics, competitive activities, fencing, etc., to be practiced for the purpose of developing a better carriage, stronger qualities of leadership, and a more effective citizenship.

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THE LIQUID CHEMICAL FOR

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904 W. Lake Street CHICAGO, ILL.

Insures Safety in Your Schools at All Times

The Norton 4-valve, 2-speed holder check is especially adapted for School House doors. Uniform speed is the safe way to close a door.

THE NORTON Single Acting, Two Speed, Holder Arm Floor Check.

This is a new Check, particularly adapted for school room doors, placed in the floor out of sight. Checks the door all the way at any speed required, a second speed at the latch either fast or slow, as required. Can hold a door open at any angle required. Also can open the door at 180° and hold it. Write to-day for our latest catalog.

INGBERG SANITARY WASTELESS FOUNTAIN



"In the Health of the People lies the Strength of a Nation." The Health of the People requires Perfect Sanitation.

All Bubble Fountains are law proof, some are Germ Proof. Ingberg Fountains are Both.

Most Bubble Fountains Waste More Water than is consumed.

With the Ingberg Fountains Waste is Eliminated.

Especially Adapted for attachment to Any Water Cooler.

THE INGBERG SANITARY SUPPLY COMPANY, EAST K. STREET MAYVILLE, N. DAK.

HERE'S THE COLLEGE SPECIAL



Always something new. Every college in the United States should be interested in this Drawing Table.

Unique in design and contains the best quality material.

Economy Drawing Tables

are built in such a way that they assist the student very materially in making drawings and sketches. There is still time to install Economy Drawing Tables in your school before the new school year. Write today for all particulars.

ECONOMY DRAWING TABLE CO., 324 Nasby Bldg., Toledo, O.

A SUCCESSFUL MEETING OF SCHOOL BOARDS.

(Continued from Page 20)

impress upon these children the command that thundered down from Sinai, when Jesus said, 'Thou shalt not kill.' I do not know by what process of alchemy we can teach pedagogy and teach civics at 10 o'clock and put a gun in a boy's hand at 11. It is a barbaric idea that war and liberty and patriotism are identical. There is none of us who has not reverence for Gettysburg; none of us who does not bow in homage at the names of Buena Vista and Santiago, and all of the rest of the names that live in history. I am not unpatriotic and I feel, even at this remote time, that if the call came I would feel like those who heard the first call in the civil war. And I can see the same glamor of the spires of Richmond etched against the Southern sun, and understood the cheer and the reason for it that went up to Heaven. But there is a better side than that."

A total of 367 persons including both members of boards of education and prominent educators, attended the annual luncheon of the Department in the Grand Ballroom of the Waldorf-Astoria Hotel, and listened to brief addresses by Mr. O. M. Plummer, David B. Johnson, Joseph Swain, C. G. Pearse, Mrs. Cora Wilson Stewart, Mrs. Ella Flagg Young, and others.

The Second Session.

The closing meeting of the Department afforded an unexpected opportunity for the airing of the recent Chicago school troubles. The session was opened with a paper on the functions and duties of school boards by Miss Beatrice Winsor of Newark, N. J. Miss Winsor's paper, which is reproduced on another page, aroused considerable approval especially when she argued for proper recognition of the legislative functions of school boards as distinct from the executive functions of the superintendent.

President Plummer who followed Miss Win-

ser, discussed his impressions of school surveys in general and of the recent survey at Portland in particular. He argued that the superintendent should say who shall teach and what shall be taught, and that the school board should stand back of the superintendent and co-operate with him to the fullest extent. When the superintendent is no longer able to satisfactorily attend to these two details of the school administration, it is time for the school board to get a new superintendent. Mr. Plummer made an eloquent plea for school boards becoming acquainted with the schools thru direct contact with the teacher in the classroom. He urged that no school board member is worthy of his position if he does not spend some time in the schools so that he may get thoroly into the professional spirit thru actual contact with the schools.

Mr. C. B. J. Snyder who followed Mr. Plummer, argued that the best schoolhouse will not be successful architecturally unless proper care is given to the structure in the form of efficient janitor service, careful handling of the mechanical equipment, careful upkeep and repair. Mr. Snyder's paper will appear in an early number of the JOURNAL.

The place of State School Commissioner Finley of New York on the program was taken by his associate, Dr. Thomas E. Finegan, who has been for years a leader in securing reform in the school boards of the Empire State. Mr. Finegan pointed out that education is a state function and that school boards while they are local in their selection and activities, are agents of the state and not of the municipality. Mr. Finegan made clear that success in American school administration depends very largely upon the recognition of the principle that education is primarily and at all times a state function. Safety against inroads upon educational funds and educational activities can only be made certain by strict adherence to this principle. Dr.

Finegan cited some interesting cases of abuses in city school administration which had grown out of the refusal to recognize the school board as a state body and which had been primarily removed thru legislation.

Mr. Loeb vs. Mrs. Young.

The fireworks of the session was afforded by Mr. Jacob M. Loeb, president of the Chicago Board of Education. Mr. Loeb, whose paper is printed on another page, bitterly assailed the Chicago Teachers' Federation and argued against a unionization of teachers.

Mrs. Young who had been asked to speak on some general topic related to the school superintendents, closed the session with a spirited reply to Mr. Loeb. Mrs. Young said in part:

"I thought this morning that I should speak simply on the subject of 'The Superintendent's View of How to Improve Schools.' But some statements in the last paper will oblige me to move somewhat from that subject and get the truth before you.

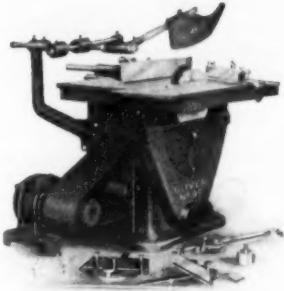
"First and foremost, the greatest difficulty of a superintendent of schools in relation to the teacher is recognition of the power and right of freedom of thought. Men who have never been superintendent of schools have no conception of the difficulty that attends one who has been down in the ranks and finally gets up on the box, to keep from wielding the whip and making all others subordinate, and it is the same way with the person who gets on the board of education.

"The feeling of authority which possesses the human soul when it gets into a position of recognized influence is something that no one can fully compute. I remember some two years ago a woman, now dead, told me that she was walking along the street with a member of the board of education and finally she said, 'Stop! Stop right here! I think you hold an erroneous idea, do you think that you hire me and pay me my salary? The people of Chicago pay my salary, not you! You are one of those chosen to act

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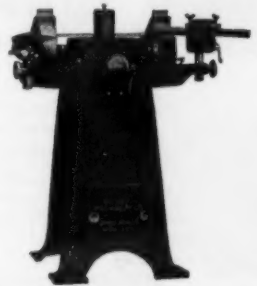


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for the city but you, yourself, do not own me. I am not owned!" He prevented a schoolhouse being named for her when she died.

"There is no class of people that today seems to be more restricted with regard to the right of speech than school teachers. Since I ceased to be a superintendent, since my name was 'left off,' a person who had heard me speak in public often, said, 'How much more independent you seem since you are not owned.' And I think this is the case.

The People Behind Board Members.

"No one realizes more fully than I, the difficulties in carrying out that plan which has been referred to by the president, and was very finely outlined in the first paper by Miss Winsor. Having the members of the board attend to all of the administrative business affairs and the expert, the superintendent, attend to the educational affairs. And in the last part of the first paper was the gathering up of the main difficulty, that the men and women who are on the board, almost without exception, are there with some one behind them. If they are successful businessmen the commercial organizations are behind them, and the successful women have the women's clubs behind them, and so they must maintain the standards set by the men or the clubs or the organizations which have put them there as the mouth-piece.

"Labor unions, teachers in federations, teachers whose federations are affiliated with labor unions, seem to be the main point in the mind of a businessman as regards the schools.

"The teachers of this country have the great work of preparing the citizens for efficient membership in this democracy when they become voting citizens. Now that is not presenting a sentimental view which always takes with every-

body—it takes with me—which represents the teacher and the board member as deeply interested in the future of the child—the greatest asset in the world. In speaking of this government, the teacher has to prepare the pupil, not, as in common parlance, as one of those who are taken to the polls and referred to as 'voting cattle,' but as men and women who know the duties and the rights of an American citizen and are ready to meet them and fulfill them. That is the work of the teacher.

"First and foremost, comes the right to think. Next comes the right to express that thought; to express it, not in digs, not in vituperative language, not in daring members of the board and other teachers to oppose them, but to present thought impersonally, and any person in the teaching force who has not the power, the strength, the mentality to exercise the right of human mind, and then to express it so that as thought it will carry itself to their minds. Any such person is not fit to be in the teaching corps.

Freedom and Large School Systems.

"When I began teaching in the city of Chicago the teaching force was so small that the superintendent, who had his institutes once a month, had in one schoolroom the teachers of the high school, the principal of the high school—there was then only one—the principal of the elementary schools and all of the grade teachers. There we met and discussed on the same floor, the same level, the subjects presented to us or that were raised by others there in that assembly. But today it is simply impossible for the teachers in a great city, or even for the principals in a city like New York, to meet and discuss freely the questions—a few do the talking and they talk to the galleries. Now with this growth of the public school system in cities

like New York and Chicago, where a large proportion of the membership of the public school is of foreign element and of Americans who have not yet learned to be successful businessmen, the teachers—and it is not so only in these two cities but wherever there has been developed a goodly sized school system—there has been a tendency toward factory evolution and factory management and the teachers, like the men who stand at the machines, are told to watch the struggle—"you take this piece of paper and you hammer this thing—you do that piece of work." The teachers, instead of being the great moving force, educating, developing the powers of the human mind in such a way that they shall contribute to the power and the efficiency of this democracy, have become merely workers at the treadmill, to a large extent, and they are doing, all thru this country, that which shows that it is hard to crush the human mind and the love of freedom in the hearts and lives of people who are fit to teach school, and as a result, they are organizing themselves to discuss those questions which are vital in the life of the children and in the life of the teachers, and you cannot separate the life of the children and the life of the teacher and know what you are talking about.

"In Chicago—I might as well say Chicago outright, you know what has been said referred to Chicago—as a District Superintendent I saw the beginnings of the Chicago Teachers' Federation, I felt very uneasy, I feared those teachers were getting to be too grasping—what were they organizing in the federation for, independent of the superintendents and the board of education. I was not large enough in the beginning to see, I had not the insight to see that these women were realizing that they had not



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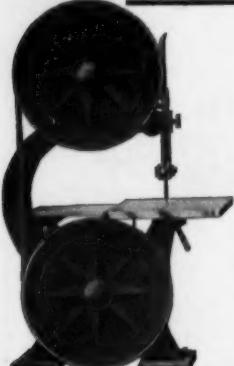
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the freedom, the power, which people should have who are going to train the minds of the children. They came to the committee on school management with committees and asked that the board consider increasing their salaries. I can see that committee now, as it sat there and listened calmly, with immovable, expressionless faces. When all had spoken, the chairman asked if there were any more to speak. There were no more, and they were dismissed, and then a smile went around that table. They had had their say. I don't know whether you take that situation in fully or not. The result was—nothing! And again they came, and the same courteous reception and the same dismissal and the same nothing! And after a while they said, 'This is silly!'

"They are a good deal like the women on the matter of suffrage just now. We have been sitting back saying we must be good and we must ask for what is given us and of all things, we must not show any spirit or any desire to push ourselves forward, and at last, after years and years of waiting—and I can speak as nobody else in the room can of the years of waiting—the women have said: 'We have got to be more than weary waiters at the gate'—and that is exactly what these teachers did.

"When they went into affiliation with the labor union I was sorry. I thought they had made a great mistake and I said so publicly, that I thought it was a mistake, and on general principles I would be willing to make that statement today—but what affects my general principles and brings me down to something special? It was this. They found that in order to get anything done they would have to get voting power behind them. And the people, the men,

and I have no opposition to the men—I married one—they found that the men in their own station and rank in life, and the college bred men—were not ready to do anything for them and they had to go in with those who had felt the oppression and the grind of the power of riches. That is why they went into the federation of labor.

"Now with regard to their brow-beating young teachers: If a person wants to make friends with one in authority, if that person has a noble mind and dare speak what is in it, speak it properly, that person will go to those in authority and lay his condition or wishes before them. But if a person has a mean mind, that person will go and tell the person in authority, that petty thing against somebody which will please the person in authority. That, I think, is the main source of the talk which has been repeated here more dramatically than I can repeat it. A person will go to those who are opposed, and they have gone to those who are opposed to the Federation of Teachers, and have described those things which were described here.

"Now, my friends, which shall we accept? The words of a body of teachers who have studied the way to lead children to the higher lights and broader spheres, the dignity and nobility of citizenship in this country, or shall we accept the tales told by those who curry favor? That is what I want to know, and I speak in all sincerity, just as I assume the speaker before me believed what he said. But I know more about it. I know that these talks of intimidation and brow-beating are the results of a currying of favor with those members of the board who are known to have such affiliations as to believe that teachers must come to realize that they are

of the great army of the employed and it is their business to be careful and walk circumspectly before their employers.

"I want to make one more point. In every body of people there will always develop two parties. It is for the good of the nation that we have the radical and the conservative. It is for the good of any organization that there are two parties, but not necessarily factions. But what are you going to do if bitterness is developed? And what develops bitterness? That is the question. There is evidence and report of great bitterness in the system. I believe—and I have visited the schools of almost every large and middle-sized city and town in this country—I believe that nowhere else does there exist a clearer vision of the work of the public schools and nowhere else is there life that indicates the conduct of the work in harmony with that vision than the city of Chicago."

The Business of the Department.

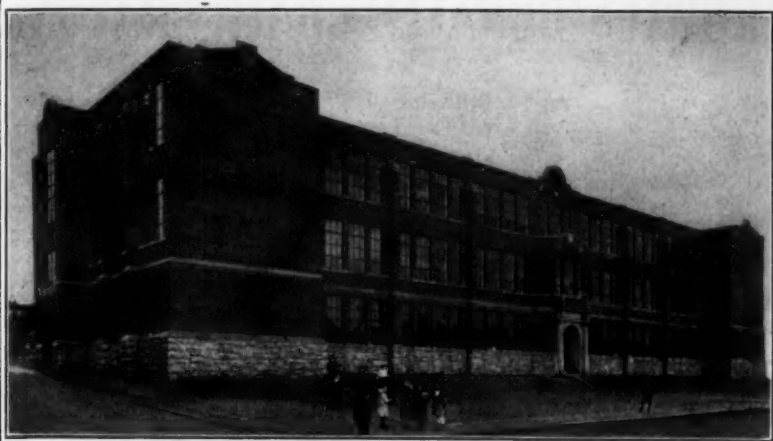
The following officers were elected:

President—O. M. Plummer, member of the board of education, Portland, Ore.

Vice-President—Frank D. Wilsey, member, board of education, New York.

Secretary—William C. Bruce, editor of the School Board Journal, Milwaukee, Wis.

The most important action of the Department, and one which promises an investigation of wide value, was the appointment of a committee on Wednesday morning, to study standards of schoolhouse design and construction. The committee is headed by Frank Irving Cooper, Architect, Boston, and includes Supt. C. E. Chadsey of Detroit, Mich., Dr. Lewis Terman of Pittsburgh, Pa., Dr. Leonard P. Ayres, New York City, and S. A. Challman, Minneapolis, Minn.



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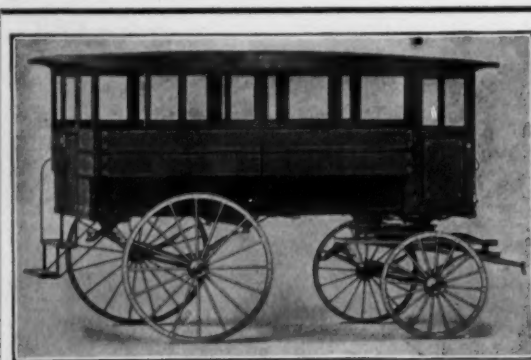
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(Continued from Page 17)

life. It is the motto 'safety first' wrought into the fabric of the artisan's home. Second among its values I should put the bringing of power to industry. Too much our factories have been run as schools operated in their productive processes by masses of untaught. Too much has the time of foreman and superintendent been given to work of instruction instead of to leading production. Peace and prosperity would indeed be within our palaces of industry if it should come to pass that within each great mill all workers know their work. Consider the value to a great department store of a whole force of clerks trained in salesmanship. Consider the value to a great mechanical industry of a working force in which each unit does with reason and intelligence, the work to which his hand is set. Behold under such conditions how waste goes out at the door and with her the rule of thumb and all things born of ignorance. Consider the peace and power of the manufacturer in whose works blunders of ignorance are not committed. It would be almost a millennium to think of a great mill in which every worker is well trained in his or her work. This fine result of industrial training has not only human and industrial values but international ones as well. Our country is in the world's arena and it cannot retire from it. Your prosperity and mine and the wages of our workers, more and more depend upon what we call our competing power, and every boy and girl in every mill who has had no chance to learn and who, therefore, does not know the why and wherefore of his or her work is a missing tooth in the gears by which our industries re-

volve. It makes one proud and confident to think of America facing the world in the peaceful conquests of industry supported by trained and intelligent workers in all our mills and factories. It makes one rather sad to think of America trying to meet the world in competition unless and until her workers shall have had a chance at that education which has heretofore been denied them. Of infinite value are our boys and girls but we have not made the best of their values heretofore. Most of us must needs work but few of us have ever been taught to work and work therefore has been harder, less productive and less remunerative than it would have been had we done more wisely. We have seen a great light these recent years and have learned that the means whereby we live are well worth studying and teaching that we may live better and with less care."

The final session on Friday evening proved perhaps the strongest of the week's general sessions. Mr. Wm. Wirt described the Gary system and Mr. Samuel Gompers described the relation of the school and the working man. "The organized labor movement," said Mr. Gompers, "has this message for teachers. If you wish to be free, if you wish to be independent, to perform the greatest work intrusted to you nobly and for the best interests of the citizenship of the country, join with us for your and our common protection and betterment." The labor movement, in Mr. Gompers' opinion, and the schools have essentially the same ultimate purpose—the betterment of all the people.

Prof. Dewey of Columbia University, described extensively the philosophy underlying a national system of education. He urged that

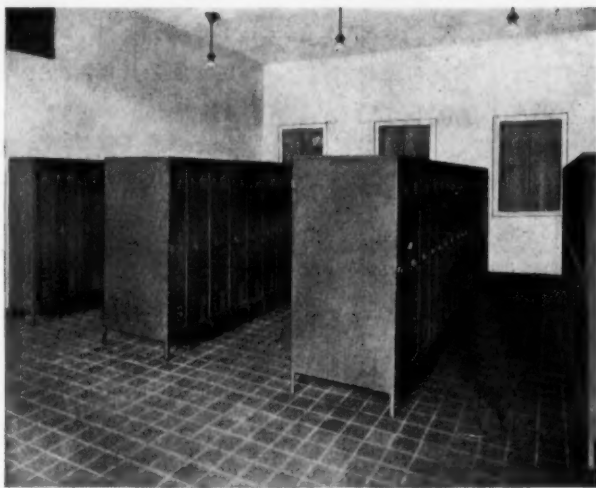
the problem of hyphenism should be welcomed and should be made the most of in readjusting the national character of the American people. The session was closed by an eloquent plea for a national university by Congressman S. D. Fess of Ohio.

If any one thing impressed the persons who attended the general meetings it was the introduction of a number of speakers who are not professional educators at each session. Most of these men and women discussed national, social and civic problems which have a decided bearing on education and educational problems. This feature of the general meetings was a splendid evidence of the interest which educators are taking in general problems outside the classroom. While a few speakers abuse the privilege of appearing before the association by frankly making propaganda for their particular interests, the experiment proved to be genuinely successful and may well be repeated in the future needs of the association.

While none of the meetings brought out any essentially new theories or new viewpoints in educational organization or practice as applied to the elementary and secondary schools, there was much wholesome, inspirational matter and much sound, practical discussion of matters upon which there is substantial unanimity.

THE ANNUAL MEETING.

The annual meeting of the Association handled its business with rather more than the usual dispatch and, for the fact that the opponents of military instruction in the schools and the defenders of the proposed system were determined to air their respective points of view, the meeting might readily have been concluded in half



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Chairman Pearce of the board of trustees in reporting, showed that the Association has a total of \$187,602.50 invested in permanent funds, from which a net income of \$7,178.85 was received during the past year. Miss Grace Shepherd reported that her total receipts as treasurer were \$39,912.88 during the year just closed, while the disbursements were only \$37,157.67. With a balance brought forward from the previous year, the Association had at the beginning of the New York convention, the sum of \$5,371.88 in its treasury. The returns from the New York convention will not be less than \$60,000 so that when the expenses have been paid, there will be a comfortable margin and not less than \$5,000 may be added to the permanent investment fund.

The Association appropriated a total of \$9,553 to be spent during the coming year by the several committees now engaged in educational research. A very wise provision was inserted in the resolution that several of the committees make final reports in 1917 and 1918. There has been a noticeable tendency in recent years for committees to seek a continuance of appropriations from year to year "for further study" without making any definite reports. The ruling of the executive committee should have a salutary effect upon all committees by impressing upon the chairmen and members the necessity for prompt action and definite reports and working recommendations. The committees for 1916-17 and the amounts appropriated are as follows:

Committee on Salaries, Tenure and Pension	\$1,000
Committee on Health Problems in Education	1,000
Committee on Vocational Education and Vocational Guidance	500
Committee on the Reorganization of Secondary Education	1,000
Committee on the Improvement of Physics Teaching	200
Committee on Superintendents' Problems	500
Committee on Economy of Time in Elementary Education	250
Committee on the Culture Element and Economy of Time in Education	50
Committee from the Library Department	125
Committees from the Department of School Patrons	50
Committee on a National University	500
Committee on Problems of High School Libraries	50
Committee on Visual Instruction	30
Committee on Elementary School English	150
Committee on Rural Education	1,000
Committee on Military Training	500

There was during the meeting a notable absence of political maneuvering and the suggestion made early in the week that Robert J. Aley, president of the University of Maine, be chosen as president of the Association, received general commendation. The report of the Committee on Nominations was accepted unanimously and the following officers were declared elected:

President, Dr. Robert J. Aley, President of the University of Maine.

First Vice-President, David B. Johnson, South Carolina, retiring President of the Association.

Vice-Presidents, Mrs. Mary C. C. Bradford, Colorado; Cornelia Winslow, Arizona; Charles J. Koch, Maryland; J. A. Churchill, Oregon; F. W. Longanecker, West Virginia; F. W. Winner, Oklahoma; W. R. Siders, Idaho; Mrs. Josephine C. Preston, Washington; Miss Frances E. Harden, Illinois; J. L. Henderson, Texas; Payson Smith, Massachusetts.

Secretary, Durand W. Springer, Michigan.

Treasurer, Miss Grace M. Shepherd, Idaho.

The discussion of the resolutions brought on the one real fight of the business meeting. Prof. James McKeen Cattell of Columbia University objected vigorously to the final paragraph of the resolutions which mentioned military training as follows: (The Association) "while it recognizes that the community or the state may introduce such elements of military training into the schools as may seem wise and prudent, yet it believes that such training should be strictly educational in its aim and organization, and that military ends should not be promoted to pervert the educational purposes and practices of the school." Prof. Cattell, Miss Kate D. Blake, Mrs. Fannie Fern Andrews and several other advocates of pacificism argued violently against the resolution which they declared to be a complete reversal of the Association's position taken last year at Oakland. Mr. Wm. B. Owen, chairman of the committee, replied that the resolution as it stood, neither favored nor disparaged military training, but insisted that such military training as shall be offered, must be for educational purposes only. Mr. Owen's stand did not particularly meet the approval of the advocates of preparedness; it still did not meet their opposition because it was apparent that any resolution intended to favor the spirit of militarism was foreordained to failure. The

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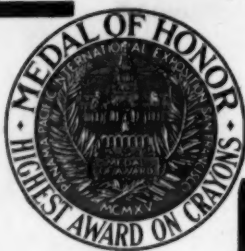
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resolution was finally adopted by an overwhelming majority.

The convention did not enjoy, as it has in other years, a hot contest for the next convention. The representatives of Cincinnati made some propaganda for their city and seemed to receive considerable encouragement. The preferential vote of the board of trustees on Saturday, did not express a majority sentiment for any one city. Asbury Park received the largest number of votes and Portland, Ore., Cincinnati and Milwaukee received some support. The final decision will probably not be made before the meeting of the directors in January, 1917.

The Management of the Convention.

Secretary Springer and his assistants managed the convention with more dispatch and less friction than any previous meeting of the Association. Everywhere the highest satisfaction was expressed with the manner in which the thousand and one details incident to the 84 departmental and twelve general meetings were handled. Every item of registration, hotel accommodations, etc., moved with a smoothness and celerity that is only possible as the result of experience and wise planning.

The commercial exhibits were nicely housed in the basement of the Madison Square Garden and several thousand teachers availed themselves of the opportunity of examining books, maps, tools and other teaching aids. It was apparent from reports made by visitors and exhibitors that the summer meeting needs an educational commercial exhibit as a regular feature and that the exhibit will be profitable not only to the teachers but also to the exhibitors if the teachers' aids and books are properly emphasized in the displays.

The Entertainment.

The entertainment which the New York teachers and the several committees of citizens prepared were conceived and carried out on a scale that aroused not only the wonder but also the admiration of the visitors. Miss Grace Strachan who acted as chairman of the committee on receptions and who proved to be in fact, as well as in name, the official hostess, provided several receptions and a large dancing party at the Biltmore Hotel, that for variety and color, as well as setting, could hardly be excelled. Miss Strachan and her associates attended to the details of entertainment with a competence and dispatch that was particularly striking.

Considering the important news from the European war fronts, and the presence of an epidemic of infantile paralysis, the New York papers gave the convention unusual attention. It was particularly gratifying to find that the papers did not emphasize the sensational, but that they seriously reported all of the important doings of the meetings. Several of the papers devoted an entire page daily to the general and departmental sessions. The press work was thoroughly organized by Mr. J. W. Searson so that not only the New York papers but the entire press of the country, received very complete information on each day's doings.

NEW RULES AND REGULATIONS.

Pasadena, Cal. The board has adopted a rule which provides that any teacher who becomes eligible for a state pension shall be automatically discharged from the service. To be eligible for a pension, an instructor must have taught thirty years and must have been in the state fifteen years.

The Maine Interscholastic Athletic Council has adopted a set of regulations to control and govern the interscholastic athletics of the state. The following rules of eligibility have been adopted:

Article I.—No boy shall be eligible for any interscholastic athletic contest who is not maintaining for the current term, the minimum requirements of the school of which he is a member; provided, however, that the minimum requirements shall not be less than 15 periods of prepared work a week or its equivalent.

Article II.—New students, in order to be eligible, for football shall enter school within three weeks of the opening day; in order to be eligible for basket ball and indoor track shall enter before or during the first school week after the Christmas season; in order to be eligible for baseball and outdoor track they shall enter before March 1.

Article III.—A student is ineligible to participate in any interscholastic athletic contest who has represented in athletics a Class A secondary school or schools for four years.

Article IV.—In all interscholastic athletic contests each principal shall furnish to the principal of the opposing school, or his representative, a certified list of approved players.

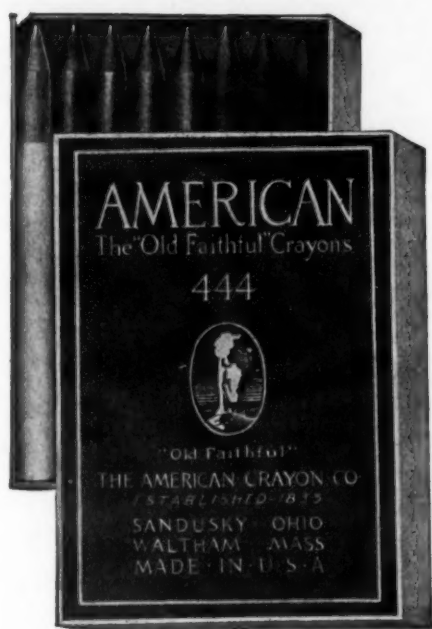
Under Article I of the rules, the athletic council says that the words preceding "term" shall be interpreted to mean the term in which the pupil was last in attendance; provided, however, that a pupil who has failed for the preceding term may not remove such disqualification by making up the work at some succeeding term. Thus a pupil who has failed in the required work of spring term may not become eligible for football in the succeeding fall term by making up the deficient work during the intervening summer vacation.

Under Article III the council interprets that a pupil who has played in one or more interscholastic games in any school year shall be regarded as having represented his school in athletics for that year. Class A Secondary Schools shall be interpreted to mean Class A Secondary Schools of Maine or those of corresponding standing in other states.

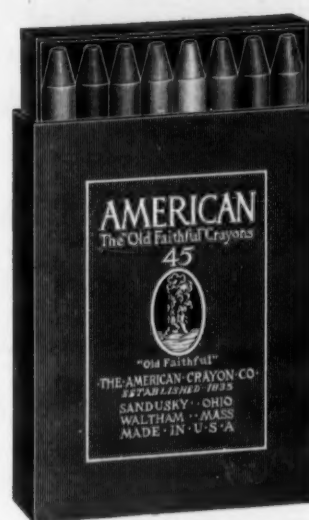
The athletic council recommends that no school which is a member of the state league shall engage in any athletic contest with a school which is not a member.

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Book Reviews

Public School Administration.

By Ellwood P. Cubberley. 479 pages. Price, \$1.75, net. Houghton Mifflin Co., Boston.

The strongest, sanest book which has been published on city school administration. The author has succeeded in compressing within a limited space a very complete statement and discussion of the well-established principles underlying the legal and practical aspects of school organization and control,—the functions and duties of school boards, the superintendent, the organization of the educational, business, health, etc., departments, the teaching corps, the course of study, etc. The weakest chapters in the book are those devoted to business aspects of city school departments as related to general business management, erection, maintenance and repair of buildings, finance and accounting. The shortcomings here are rather faults of omission in that the author does not sufficiently go into detail but seems to underrate both the number and magnitude of the problems.

The Story of the Earth.

By Carleton W. Washburne and Heluiz C. Washburne. 107 pages. Price, \$0.45. The Century Co., New York.

A scientific reader, we believe, should make very clear the difference between established scientific fact and theory. The present interestingly written and well illustrated volume, would better serve its purpose if it told plainly what has been demonstrated and what is still conjecture about the early history of our earth.

The Teaching Staff.

By Walter A. Jessup. 115 pages. The Survey Committee of the Cleveland Foundation, Cleveland, O.

The Cleveland teachers, as a whole, do not

stand out in an enviable light in this searching inquiry into their salaries, experience, tenure, training, promotion and discharge. In general, the report shows that Cleveland stands eleventh in a list of thirteen comparable cities in the salaries paid, that stand-patism in appointments and tenure exist, and that it is difficult to discharge or improve teachers who are not positively inefficient but who are not doing satisfactory work, denoting growth and progress.

Practical Lesson Plans in Harmony.

By Helen S. Leavitt. Cloth, 12mo, 101 pages. Price, \$0.60. Ginn & Co., Boston.

A very teachable book of lessons in harmony. It has been developed from many years of teaching experience and has the merit of being brief, definite and free from confusing detail. The book will be useful in advanced high-school classes as well as in conservatories.

The Story of Agriculture in the United States.

By Albert H. Sanford. Cloth, 394 pages. Maps and illustrations. Price, \$1. D. C. Heath & Company, Boston, New York, Chicago.

This book is a story not a history, of agriculture in the United States. The latter is yet to be written. This story, however, contains much of value and interest and will make the study of American history more vital and significant.

Between farming among the Indians and irrigation and dry farming in our arid regions there is a wide range in time, space, development. The small but important colonial beginnings are followed by mention of the use of improved methods and the gradual introduction of high grade stock by progressive farmers of that day. The rise of cotton, the occupancy of prairie lands in the Middle West, the marvelous westward march of wheat from Virginia in 1800 to California and Oregon in 1870, the age of machinery from 1825 to the present time have due space. Animal husbandry, dairying, scientific agriculture, marketing associations, improvements in rural life are now in the front. It must be admitted the farmer's wife is often forgotten. Not until there is running water in the farmhouse kitchen will she have her greatest need met.

Among many good maps and charts are: One of Washington's farms in Mt. Vernon; one of irri-

gation projects in the United States; one of creameries in Wisconsin; one of agricultural extension meetings held in Alabama (1914).

Farming and farmers form the foundation of society. The late J. J. Hill was a builder of railroads and a maker of farming communities. He once said: "The agricultural interests represent one-half of the population of the United States, one-half the capital and about all the patriotism and feeling there is. The man who owns the land is the strongest factor in affairs. I will devote myself to ministering to his prosperity and I'll take the chance on what happens to me then."

Education Thru Recreation.

By George E. Johnson. 95 pages. The Survey Committee of the Cleveland Foundation, Cleveland, Ohio.

In 1915 the Survey Committee of the Cleveland Foundation conducted an educational survey of Cleveland. One result is a report of 25 sections of which "Education thru Recreation" is one.

This particular report makes favorable mention of the size, equipment, and adaptability for play of the school yards—44 schools have gymnasiums; 7 have spaces prepared for swimming pools, two of which are installed; 64 of the school buildings have either one or two playrooms. It is forced to remark under unfavorable mention that 25 out of 31 gymnasiums in the elementary grades lack equipment, making them nothing but additional playrooms. Only two of the swimming pools have been completed and put into actual operation. In one case the janitor, with a commendable sense of social responsibility, allowed the boys to swim on Saturdays. That janitor should be canonized. The committee object to the rule of the board of education that "pupils, except by special permission, will not be allowed to remain on or revisit the schoolyards after dismissal." Another mournful fact is the playground apparatus put into cold storage the entire year, leaving only the denuded frames. In the summer vacation of 1915 eighteen of these playgrounds were in operation, under-trained supervision, for 49 days. Approximately 10,000 children were enrolled. Average daily attendance for all the playgrounds was

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2. English Speech Sounds, an enlargement of the table on p. XIII in "The Pronunciation of English."

Initium. A Latin Book for Beginners on the Direct Method. By W. H. S. Jones, M. A. and R. B. Appleton, M. A. 40 cents.

Via Nova or the Application of the Direct Method to Greek and Latin. By W. H. S. Jones, M. A. 90 cents.

On the Art of Writing. By Sir Arthur Quiller-Couch, M. A. \$1.50.

Plane Trigonometry. By A. M. Harding and J. S. Turner. \$1.10.

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3,334, or 222 for each. These children must have liked to play under good supervision. At all events they were kept from the street, the vacant lot, and the movies.

The committee also advise that indoor recreation should, so far as possible, become outdoor recreation. The plays at this time should perpetuate the play traditions of the nation—nooks and corners around school buildings should be equipped for the "little tots." Apparatus should be taken from storage, put upon its frames and used out of school hours. It is urged that far more attention should be paid in the elementary grades to hardy, organized games. They are needed to give fiber to growing boys and girls.

Play, a chance to play, is one of the natural rights of children. It may be made more than mere recreation, tho that alone justifies its claim to existence.

Boswell's Life of Johnson.

Edited with notes and an introduction by Max J. Herzberg. Cloth, 289 pages. Illustrated with portraits. Price, 40 cents. D. C. Heath & Company, Boston, New York, Chicago.

Boswell's Life of Johnson is admitted to be one of the three great biographies in the English language. As its length is staggering a good abridgment is welcome.

The introduction tells something of Boswell, the eccentric Scotch lawyer who achieved distinction thru his biography of Johnson. Critical opinions, suggested readings, twenty pages of exceptionally valuable extracts from Johnson's works, together with a collection of his sayings and anecdotes afford means of making the acquaintance of the most interesting and impressive personality in the literary history of the Eighteenth century.

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of Mahomet, hater of idolatry and founder of a great religion. In what lay the secret of their power? Their personality was probably the most important factor, as great leaders like poets are born, not made. Yet each of these leaders perseveringly used every circumstance, favorable or unfavorable, to gain a definite end. Less gifted men and women would do well to follow their example.

Laboratory Lessons in General Science.

By Herbert Brownell. 215 pages. Price, 80 cents. The Macmillan Company, New York.

These lessons assume a high school having a laboratory with more or less equipment. They also assume that there shall be a period for laboratory work and also a period for classwork. The number of such periods per week is not stated. The lessons themselves consist of questions and experiments upon the elementary principles of those sciences usually taught in some high school course and are designed to be used in the first year as an introduction to a closer and more extended study of some of these sciences later in the course.

Community Hygiene.

By Woods Hutchinson. 310 pages. Price, 60 cents net. Houghton Mifflin Company, Boston, New York and Chicago.

This author, a president of the American Academy of Medicine, may write with authority on this subject. Then, too, "the best medical experts in the country have stamped this series as scientifically accurate and unusually sound." A clear convincing style, an orderly arrangement give force to the facts stated and the conclusions drawn.

What is this "Community Hygiene?" It is a series of commonsense talks to fifth and sixth-grade children, telling how life in the home, the school, the community may be so ordered that they may be well. It is such a boon to feel well that hardly any effort is too great to get it and to keep it. Good arrangement and proper care of every nook and corner in homes and in schools is taken up in detail. The value of attention to these details is either plainly stated or plainly implied.

But, now-a-days, pure food, pure water, dis-

posal of waste and sewage, clean, well-lighted streets, life-giving parks, playgrounds, and swimming pools are too large problems for the home to tackle. Here is the opportunity of the community. In twelve chapters children are told how the community helps them and now they can help the community. They can help. In a great Chicago daily a woman has told this season what the children in her block have done. She talked over the situation with the right kind of a boy—a born leader—and he organized his squad. The squad cleaned up backyards and alleys and kept them clean. This woman gave them a day's outing they remembered. Everybody was glad. Ah! yes, children can do a lot toward keeping homes clean and before one knows these same children are men and women, having some ingrained ideas about wholesome living.

Elementary French Reader.

By Louis A. Roux. 150 pages. Price, 50 cents. The Macmillan Company, New York.

A glance at the table of contents shows three fables and an anecdote by La Fontaine, also that exquisite "The Last Recitation" by Daudet. These alone are enough to stamp the whole with a hall-mark of excellence.

The editor begs us to notice that tenses have been introduced gradually, that the vocabulary has been prepared with great care, notes having been combined with the vocabulary, that in the questionnaires some questions require a reproduction of the text. A map of France, a table of irregular verbs, conjugation of regular verbs, a list in French of classroom directions, poems to be memorized, are also given.

The plan of this book promises a partial realization of the editor's aim—to make la belle langue française a spoken, living language.

The Travels of Birds.

By Frank M. Chapman. 12mo. cloth, 160 pages, illustrated. Price, 40 cents net. D. Appleton & Company, New York.

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many of these routes. An inborn impulse sets the date of migration; their sense of direction holds them year after year to the same route, the dangers by the way often diminish their numbers.

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Commercial Law.

By Kenneth F. Burgess and James A. Lyons. Cloth, 392 pages. Lyons & Carnahan, Chicago, New York.

Two teachers of commercial law—one a member of the Wisconsin bar—have collaborated in preparing this textbook for high school and college classes in business law. The fact that most teachers of the subject are not practicing lawyers and that practically all students have had no business experience has caused the authors to emphasize many topics which are relatively simple to the experienced businessman. The book is developed topically and every important principle is illustrated by a "case" taken from actual court decisions. The chapters devoted to contracts are particularly clear and complete. The language of the book is natural and free, and superfluous legal verbiage has been carefully avoided. In all, the book is the best balanced text we have seen.

A Treatise on Electricity.

By F. B. Pidduck, fellow of Queens College, Oxford. Cloth, 646 pages. Price, \$3.60. G. P. Putnam's Sons, New York.

This volume discusses the subject both from a theoretical and practical standpoint, for advanced students. The first eight chapters are introductory in establishing principles which underlie the special subjects discussed in the balance of the volume. The book will be valuable for advanced college classes in electrical theory.

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By Mary E. Williams and Katherine R. Fisher. Cloth, 405 pages. Price, \$1. The Macmillan Co., New York, Chicago.

This revised and enlarged edition of a standard textbook in the theory and practice of cooking will be welcome. For the grammar grades it is the best with which we are acquainted. The new edition has new chapters on the serving of food and laundering, and much material has been added to every chapter, particularly to the discussion of the preservation of food, food for babies and digestion. The changes which have been made largely as a result of classroom use of the book, adapt it better to the widely varying conditions found in large and small schools.

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By Joseph S. Chamberlain. Cloth, 319 pages. Price, \$1.60. The Macmillan Co., New York, Chicago.

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Charles E. Smith. Stiff paper, 76 pages. Price, \$0.60. Isaac Pitman & Sons, New York.

This revision of a widely used standard text is very satisfactory. The writing of sentences and capitals is begun in the third lesson and figures are introduced in the tenth lesson. Throughout an attempt is made to have the student go forward with the work with the least help from the teacher.

COMPULSORY EDUCATION IN NEW JERSEY.

At a recent meeting of the boards of education of Cumberland County, New Jersey, the members listened to an interesting address on the enforcement of compulsory attendance in Buena Vista Township, Atlantic County. The speaker, Mr. Charles Wray, a member of the board, showed how results may be accomplished thru removing the forbidding atmosphere of schoolrooms, making them pleasant and providing incentives whereby pupils find it a pleasure to be in constant attendance. The plan as worked out by the board is explained in the following extract:

"Our Board, however, seldom invoked the ter-

rors of the law. Other inducements were tried to increase attendance, such as making the schoolrooms pleasant and interesting, forbidding corporal punishment, and introducing what is known as "busy" handwork. The teachers offered inducements for regular attendance and good behavior by giving pretty cards or other inexpensive articles, by inscribing the names of worthy pupils on an honor roll displayed publicly in the schoolroom, by unstinted words of praise, by visits to the homes of pupils, both as a means of getting in touch with parents and also to ascertain the validity of excuses given for absences. The Board purchased a banner to be displayed publicly for a month in the room of the class holding the record for the best attendance during the previous school month. At the end of the term a book was presented to each pupil whose attendance record was perfect, a book not costing quite as much as was given to each pupil who had missed but one day, and certificates of merit to those not missing more than five days.

"Notices were sent to offenders as in the previous school year, but the after proceedings were varied by arresting the most flagrant and persistent offender, prosecuting him before a justice of the peace and having him fined. There was no need to arrest another.

"At the end of the school term the record showed an increase of 27,000 days in attendance. That outcome was sufficient to make each and every member of the Board an enthusiastic supporter of the fullest enforcement of the law in all the years since that time.

"During November last every school made a gain in attendance, the four highest averages being 99.6, 99.1, 98.9 and 98.7.

"It appears to me that the Board of Education has no greater duty than to enforce attendance at the public schools. If education is a good thing our children ought to have every opportunity to acquire it. In the matter of compulsory attendance I have changed my views radically, and I am now satisfied that it is one of the best measures, if not the very best, the State Board of Education has ever advocated, and one that cannot fail to wonderfully help our children, our State and our Nation."

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TWO UNIT SCHOOLHOUSES.

(Concluded from Page 26)

northern end of the state by his solution of this school problem. He has erected something like two million dollars' worth of new school buildings in New Jersey in the past three or four years, most of them in small or moderate sized communities and all at moderate cost. And in erecting them he has solved the problem of providing room as the school increases without the necessity of constructing a new building.

He puts up his schools in units. That is, he will erect this year the front unit of a building, which when finished, is to cost perhaps \$150,000. He may do it at a cost of \$30,000 to \$40,000, more or less, depending upon circumstances. He purposely constructs them and plans them for this type of building. The backs may look bare and in a way forbidding and the first unit may appear unfinished in one way or another, but when the district or community takes into consideration that the first structure is only a part, and that the entire building is to be put up, as it were in sections, to be paid for in what are really easy instalments, some of the objectionable features of that type of construction can be condoned. It is the future and the completed structure that must be considered, not the first unit of a building which, when done, will be built around the four sides of a square and afford accommodation for all the pupils a community may furnish.

In the illustrations herewith the floor plans and the first units of two of this type of construction are given.

Take for example, the Linden, N. J., school. The community is a small suburban place just outside the city of Elizabeth. Like all places of that class in New Jersey, particularly near the New York side of the state, it has grown very fast these few years past and keeping up with the school population is a problem of moment.

Here are eight rooms in the first unit of a 23 room building. It cost \$33,000 to build. It provides everything which a modern school building must include in New Jersey and the regulations here are strict and exacting. It is wholly fireproof, including steel sash. The front is of brick, as can be seen, with sufficient ornament to make an attractive looking building. The outer walls are all of brick. The corridors are all fireproof, the stairs are cement and the wainscoting in the corridors is of glazed brick three feet up. The exterior brick has terra cotta trimmings. The first floor ceiling is plastered and the second floor ceiling is metal. The top of the assembly room is glass.

The building at North Plainfield, N. J., represents eight rooms in the first unit of a 21 room structure, when completed, and cost \$18,000 to build. It is brick exterior, with trimmings of terra cotta. All interior work is fireproof, including corridors, and stairs and the wainscoting three feet high is of glazed brick. The first floor is plastered, but the second has a metal ceiling.

Details of construction are for the builders. The outstanding fact which will interest school boards is not that the building is of brick and fireproof, tho that is quite important, but that

it can be erected at a moderate cost and is so arranged that further units can be added as needed without spoiling the effect of the structure, cutting off the light from the present classrooms or in any way disturbing the unity of the plan. Moderate cost and an elasticity which will assist in solving the problems introduced by growing school population are the principal features which will appeal to the school board in a small or moderate sized town. And here Mr. Allyn Pierson, the architect, has a message which any one of them might well be glad to hear.

COMING CONVENTIONS.

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Oct. 13-14—Central Wisconsin Teachers' Association at Wausau. Wm. Milne, Pres., Merrill. Probable attendance, 500.

Oct. 21—Massachusetts Teachers' Federation at Cambridge. Ernest Makechnie, Secy., Somerville, Mass. Probable attendance, 125.

Oct. 24-25—Indiana City Superintendents' Research Club at La Porte. E. J. Llewellyn, Secy., Mt. Vernon. Probable attendance, 30.

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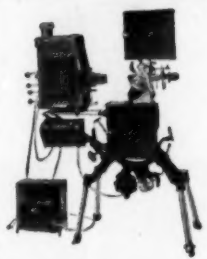
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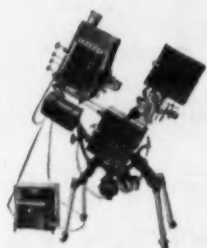
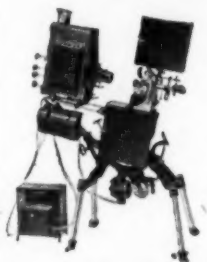
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HOW SOME PUPILS STUDY.

(Continued from Page 22)

often. The point, however, remains as to whether memory processes are not made predominate to the exclusion of the other, and whether or not memorizing of the important facts is not the logical sequence of clearly understanding the situation surrounding the facts.

It is no unfrequent sight in a study period to see pupils manifestly studying to remember; pupils reading with lips moving, then turning away from the book to say over to themselves what they have just read. A number of pupils who were taking German and Latin were observed getting their lessons day after day. Each day these pupils wrote out their translations. When asked why they did this, they said that they could not hope to pass the examinations unless they had their translations to use in review. These people did not expect to learn to translate so well that they would be able to translate in examination without an extensive review before hand with the written aid. By their own confessions, they had to have something which they could look over just before examination. Is this developing the power of translation in German and Latin or is it developing to a great extent the power of memory? Does the average pupil who depends on this method really develop independent ability to read the language being studied? Are these pupils likely to be the type who pore over the examination questions, heaving a sigh of relief at the sight of a familiar passage? How often when a simple question is couched in terms which it seems that any pupil can understand, but unlike the words of the text, the pupil stumbles and falls because the question touches no

spring in his memory that brings forth the right train of thought and words.

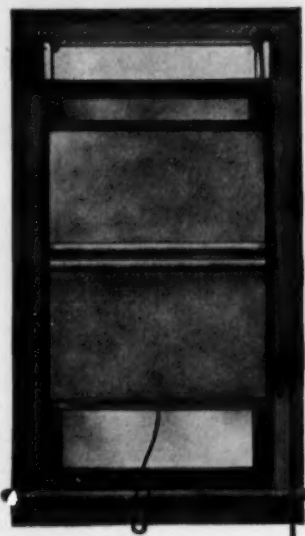
No brief is held against the use of outlines in any subject. We believe in their use as an aid to memory, but outlining is good for something besides helping to remember. The main defense for extensive outlining is that a good outline shows relationships and logical arrangement of material. Too few pupils are outlining for this reason, and too many are writing out memory pegs.

The answers to the question on reviewing seems to indicate that the cramming process is not yet extinct. It is very likely that it is the best method known to pupils. Thoro review before examinations has its purpose, but constant review is better still especially if it is done independently by the pupil. The concentrated review of the pupil just before examination smacks too much of the cramming process. A short time ago the writer visited a seventh grade arithmetic class which was covering in one year practically the work formerly done in both seventh and eighth grades. The teacher explained that she was able to accomplish the added amount principally thru her methods of review. Where she had formerly spent a considerable amount of time in formal review of various phases of the subject, she now accomplished that aim thru a constant review coupled with advanced work. All thru the year, the class was constantly kept fresh in processes that had been covered by throwing them back from time to time and coupling up the past work with the present. While this method is especially practicable in mathematics, there seems no valid reason why this cannot be followed in other subjects. We are spending from three to five weeks in most of our courses for formal review

work. This apparently gives excellent results but if the material in a course has been properly studied, understood and kept fresh by constant review and back reference thruout the year, it seems that a formal review and cramming process as it is in many cases should not be necessary. The most dangerous phase of this method seems to be the tendency to stimulate in the pupils the habit of loafing thru the course with the expectancy of securing the essential information in review. To illustrate: Last spring a pupil was sent to the office for an offense which made it impossible to reinstate him immediately. When acquainted with that fact, the pupil said he would miss out on review and would not be able to pass. This particular boy had been out of school for over a month during the first part of the year and was confident that if he could attend class during review, he would be able to pass without difficulty. In classes where the writer has known that formal review was entirely dispensed with, results that have been perfectly satisfactory have been obtained by constant review coupled with the advanced work.

It is realized that many teachers will be inclined to say that this argument is reactionary, but in the face of the stimulation of the habit of loafing thru the course in anticipation of the review, abandonment of formal review seems a defensible policy. However, this formal review is not to be confused with independent review by the pupil in order that he may thoroly understand his lessons. It seems apparent, tho, that constant informal review in place of formal review tends to stimulate on the part of the pupil frequent independent review, while formal review would stimulate "cramming."

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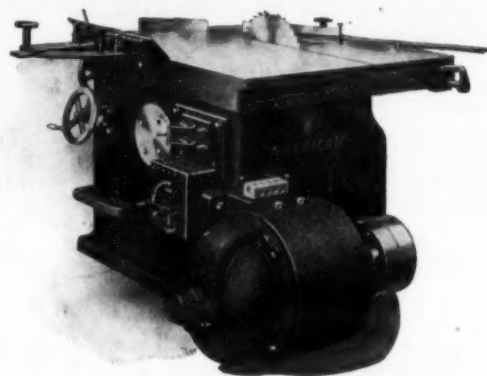
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dling the device in class. Too much care cannot be taken to make logical connections between old material and the new. Very little of the content of our courses is isolated. Practically everything follows logically after what has gone before. Making connections clear is of course largely a matter of assignment. Assignment which will do this, thru the medium of constant review is the effective method to be followed. Stimulation of the searching for causes involves the process of review and leads to the understanding of the matter rather than memorizing it.

We find a few pupils reporting that the most helpful thing to them is to get down and work hard. There is little doubt but that this is effective as a remedy in many cases. For a great many children it is the best prescription that could be given, but given alone it means little. Working hard does not necessarily mean effective work by the pupil, and the slaving over a textbook without direction to the work is certainly a very poor method.

Help from Teachers.

The question was also asked of these pupils, "What do teachers do that helps you to get lessons and understand them?" In answer, several methods were named. Fifty-five pupils stated that the teachers explained the important points to them. An equal number said that the teachers helped them by explaining or outlining the advance lesson. Fifteen said that some teachers showed them how to study the lesson; while four mentioned review in class. Two said that teachers helped them individually; one, that teachers encouraged them when the lesson was hard; another, that some teachers made the

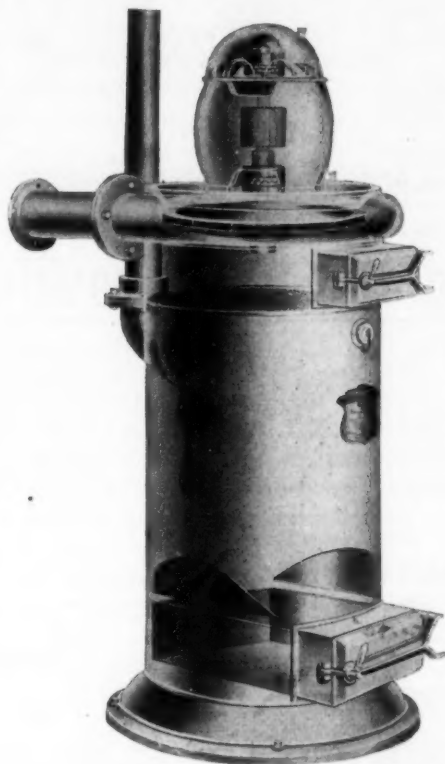
subject interesting so that he had little trouble with it. Seventy-five said that as far as they could see the teachers gave them no special help in getting their lessons or in making them easier to understand.

After all is said and done, the effectiveness with which pupils attack their lessons will depend upon the study habits inculcated in the pupils. Upon the teachers as a whole, rests the responsibility for these methods. Very often teachers complain that pupils coming to them from lower grades have not learned to study. This is undoubtedly true in many cases but it seems no valid reason why the teacher discovering this defect in her pupils should not at once shoulder the responsibility of teaching them how to study without further delay, for after all this is the important thing for the pupil to learn.

A great many teachers, if not a large majority, recognize this fact and do try to a certain extent to remedy the situation. The question then arises as to what the teachers should do in attempting to teach how to study, and how much these attempts really aid toward effective study by the pupils. From the answers to the questions it seems that there are a few devices that to the pupils seem to be effective. These are: explaining points in advance, outlining, and pointing out the important things in review. These things have seemed to appeal to a great share of the pupils. Here again arises the question as to whether these devices are really stimulating good study habits, studying to understand, or are they stimulating studying to remember, or is outlining the advance lesson so that the important points may become more apparent in a measure doing the work for the

pupils? The teacher who in the assignment, with question or with comment, provokes the recognition by the pupil of the logical connections with material already covered and in doing that brings the pupil to recognize what is important and what is merely incidental is starting properly and wisely. Provoking thought and doing the thinking for the pupil are two different things. Explaining the important points in a lesson is sometimes an excellent thing to do when the material is completely strange or of such a nature that information is the goal. "Showing how" or "telling" is not a pedagogical crime by any means. The danger lies in using the device in such a way and to such an extent that the pupil becomes dependent upon this method to the exclusion of his own development of independent ability. On one occasion, the writer happened to visit two classes in the same course under two different teachers. In one classroom on the board was a list of the things to get in the next day's lesson. The pupils were asked to copy that list and use it as a guide in studying the lesson. Explaining the use of the device, the teacher stated to the class that "those were the things to remember because they were important." In the other room, an outline had been placed on the board which showed the logical arrangement of the facts in the advance lesson and the lesson just preceding. This outline had been in use for some days and would serve for two days more. In assignment of the advance lesson, the second teacher rapidly pointed out to the class how they had progressed in their discussion to a certain point in the outline and indicated that the next logical step was that which they would

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take up on the next day. In this outline appeared nearly all the facts in the list of the other teacher, but they appeared as the logical arrangement of facts rather than a detached list of important things to remember.

Contrasted to the teacher who seeks to show her pupils how and why to look for things is the teacher who merely tells the class to study ahead. The statement by one boy, "Miss ——— says, 'Get it,'" but "Miss ——— shows us how and helps us to understand it"—illustrates what is meant. Teachers must remember that pupils are the learners of the processes of learning and understanding as well as learners of facts. Facts may soon be lost, but a habit is not easily broken.

Fifteen pupils out of the 280 reported that teachers show them how to study their lessons. Real teaching how to study seems to be a rare thing, at least as far as the pupil is conscious of it. At the same time from observations of conditions, it seems to the writer that teaching how to study is not the easiest thing that our teachers have to do. Most teachers do not know how to teach the art of study. Themselves the product of trial and error methods, they lack the real knowledge of processes of study which would enable them to teach the pupils how to study. It is the opinion of the writer that most teachers try to teach these processes and want to do it, but either do not know how to do it effectively or become discouraged and fall back upon the easiest way out. McMurry's exceptional treatise of the subject strikes at the root of the matter for many teachers, but the excellent observations of that text have not by any means been assimilated and put into practice by a majority of the teachers. The best that a great many teachers can do is to hand over to

their pupils what they themselves have found useful. What is needed here is a recognition by the teacher of the importance of study habits; the realization that pupils are studying hard but inefficiently and a determination to analyze and remedy these ineffective habits of the pupil.

It is to be remembered in the face of all this that a conscious attempt at scientific study is beyond most high school pupils unless it be a developed habit. Good studying in fact is the result of a number of habits correctly formed. Not one, but many contribute. Correspondingly, one or two devices cannot teach how to study. The teacher will have to have the aim constantly in mind and strive equally as constantly thru stimulation of a variety of good study habits, to gain the end desired.

Review in class, individual help, encouragement and arousing interest are mentioned by the pupils. These are too well known as devices to need comment. One thing is certain, however, and that is that the teacher who helps individually and who is encouraging in her manner needs little aid. Her pupils do good work.

We are constantly being confronted with the fact that pupils waste time during study periods. The study hour is sometimes looked upon by teachers merely as a task of keeping pupils out of mischief for a certain length of time. The question then arises as to what the study period should mean. The great waste of time in the study period must indicate one or more of several conditions. Pupils who waste time or look for something to do other than study during this period either do not have enough to do; do not know how to work on the lessons they have to get; cannot concentrate with others around; or do not want to study.

There is little doubt but that many pupils do

not have enough to do. One boy told me a short time ago that he did not concentrate or work hard unless he had a lot to do. How well every one of us knows that when we have little to do, we will procrastinate; while we work hard under great pressure. From the statements of pupils and from the fact that pupils are not always busy in study periods, it seems reasonable to conclude that pupils do not have too much to do. That does not mean, however, that they should carry more work or that the content of the courses should be enlarged. Rather does it mean that pupils form the habit of reading thru the average lesson, gleaning the obvious points, and deeper study is neglected. It has been observed in recitations that too much of the more obvious is sure to be required to the neglect of the facts gained only by thought and deeper study. The average pupil can read over his lesson more than once in a comparatively short time; go to class and participate in what is accepted as a good recitation. If questioned as to the deeper meanings of some of the facts, he will fail or make a quick guess. The writer has experimented with seniors on this point. Pupils having excellent grades in former courses and making excellent recitations on the printed matter in the text assignment show no signs of having done more than to just read over their lesson. Questions as to the how, why, and wherefore confuse them, and not infrequently the resort of the pupil is the answer that "It did not say anything about that in the text." Here again, we come to the matter of thorough understanding and comprehension. Pupils do not have to have it; it is not expected of them; and consequently, they do not have to use all of their time.

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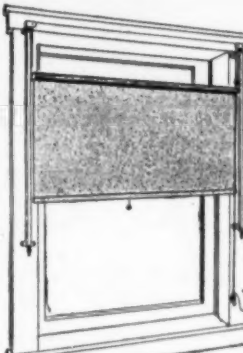
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to suggest effective remedies. In regard to this waste of time in the study period, the best method to be recommended is the combined study and recitation period. Supervised study is usually effective study. Supervised study is possible only with small groups. It is still more effective if supervised by the teacher of the subject being studied. This, together with the study-recitation method, seems to be a means of not only solving the problem of the waste of time, but also gives some direct approaches to the matter of teaching how to study, of concentration, of gaining time in study, and of stimulating better study habits and conditions all along the line.

Here again, the effectiveness of the plan depends almost wholly on the teacher, even more than under the plan of recitation and study hall periods. The teacher who does not make use of her opportunity to inculcate effective study habits will fail to gain more than under the present plan.

Studying as a process is valuable. The pupil who has gained effective study habits has gained the most important thing the school can give. Man or woman, the person who knows how to study has an asset that will always open the approach to knowledge. Likewise, the person who has failed to learn the art of studying has failed to gain the most important factor that school training can give. That person must ever be handicapped in the acquisition of further knowledge until he has learned how to study. The mission of the school is to train the power of acquiring in various fields of human endeavor and not to fill the stock room of the memory with goods that can be taken out to use when needed. True the memory store is important

and much memory work must be done, but the power to replenish the stock is the vital thing.

From the confessions of pupils, observations of students in both classroom and study hall, and observations of teachers' methods, it seems that we are stimulating memory habits to the neglect of reasoning powers; failing to demand real thought and consequently not securing as good results as we can and should have. The greatest fault is a lack of directed effort on the part of the pupils thru the ineffective methods of study. We are not requiring too much, but are we not failing to teach or stimulate those effective methods of study in pupils whereby all that we now require and more and in a greater degree of thoroughness can be secured?

The problem is that of the teacher and not of the child. Supervised study, sympathetic effort on the part of the teacher, motivated and well-organized work, and a real understanding by the teachers of the process of effective study combined and correlated by an organized attempt on the part of the whole teaching force to solve the problem is the prescription for our present condition of ineffective study habits on the part of the pupils of the high school.

MECHANICAL EQUIPMENT OF SCHOOLS.

(Concluded from Page 24)

on which are laid successive layers of tar felt, each layer being covered with a coating of hot pitch before the next is applied and all joints overlapped about eighteen inches. To protect this membrane from mechanical injury and also to form a proper base on which to erect the tile or enameled brick lining, an eight inch brick wall is built inside of the membrane along the sides and a cement floor is laid over the bottom. Then the tile, terra cotta or enameled brick lin-

ing—as the case may be—is placed to form a sanitary finish on the inner surfaces of the pool. A section of a completed pool wall is shown in Fig. 134. Here, C indicates concrete, B brick, M mortar, W waterproofing, P pool, E earth and T tile or enameled brick facing.

PREVOCATIONAL SCHOOL, STOCKTON, CAL.

(Concluded from Page 28)

plete knowledge of the work that is done. The work turned out so far has consisted for the most part of benches for the mill room, housing of the machines in the mill room, benches for sheetmetal working, cabinets for the print shop, handles for tools in the different shops, etc.

A post-graduate course was organized in February for eighth-grade graduates who did not intend to go to high school. These boys work from nine until twelve in the metalshop, and also take drawing and shop mathematics under the shop instructor. Additional academic instruction is planned so that it will be possible to include prevocational courses in both machinework and electrical work.

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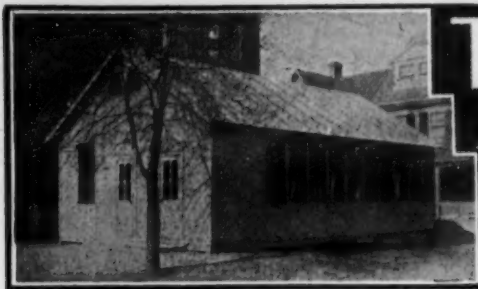
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OUR school houses are in use by School Boards in thirty States and Territories. They have double walls, thoroughly insulated, are well ventilated, dry, warm and sanitary. Are SECTIONAL and PORTABLE. Can furnish record and locations of several that have been moved and re-erected seven and eight times each. Any size: Open air and two rooms when desired.

SEND FOR OUR PLANS AND PRICES.

AMERICAN PORTABLE HOUSE CO.

3081 Arcade Building

SEATTLE, WASH.



Bossert Redibill Schools

School Houses That Are More Than Portable

We have made portable school houses for other people for over 25 years. Now you can buy Bossert Redibill School Houses with all our new patents and improvements direct from us and save money for your school board.

Each section is made with air chambers—cool in summer—warm in winter. Any one can put them together with no other tool but a monkey wrench. Sections come in three foot units—painted two coats outside and oiled inside—fine hardware attached.

We are equipped to furnish any size building on short notice. Prices of same depend on requirements and State Laws—but in every case are the lowest for quality of material supplied. Remember, this is not a cut lumber proposition, and the cost of erecting is a very small item. While not essential, as any unskilled labor can do it, we will if you desire, arrange to erect all buildings. Buildings can be taken down and re-erected any number of times without marring a single feature.

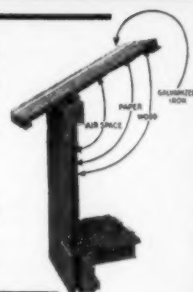
Write us full requirements and we will send details of cost of building completely erected.

LOUIS BOSSERT & SONS

Builders of School Houses for over 25 years.

1323 Grand Street

Brooklyn, N. Y.



MECHANICAL TABULATION OF SCHOOL FINANCIAL STATISTICS.

(Concluded from Page 19)

of educational results equally as thoroly as we have covered expenditures. Attendance, promotion, elimination, over-age and retardation, scholarship, and other such statistics are all susceptible of mechanical tabulation—likewise analyses of net results from courses of study, the comparative effectiveness of day, night, continuation and extension work, etc. In fact, I believe that mechanical tabulation has the possibilities of opening up a mine of the most valuable information for the educational world.

At this point, I desire to state that mechanical tabulation is like an accordion in that it has

inal statement that I believe the general principles of accounting are identical whether in private or public service, and that standardized accounting is a practical possibility. It is thru scientific codes and mechanical tabulation that this is possible. Among our largest cities, New York and Philadelphia have adopted mechanical tabulation, and I see no reason why it should not be a practical proposition for our smaller cities. In Rochester we have adopted mechanical tabulation, all the city departments are using a common code, and we are beginning to develop our expenditure and statistical data thru the medium of this agency.

Thru mechanical tabulation, we of the educational system of the city of Rochester expect

can show the cost of any one school or for all the schools on a comparative basis as well as in total. In our educational expenditure code we believe we have an instrument which will make for simplicity and clear thinking and is in itself a great common denominator. With our code and mechanical tabulation we see almost no limit to our statistical possibilities—and it will make no difference whether costs are desired on an attendance, square-foot or pupil-hour basis, that being a matter of but further development of detail.

It is our belief, that by such scientific methods as these, we may be able to produce educational data that will be of the most practical value for administrative purposes, and equally valuable in legislative and civic discussions.

In fact, it is our dream that if, in terms of service, we in the educational field can show currently and periodically what we are doing, why we are doing it, the cost and the results, then the official and the public will be interested more in policies than in detail; and that eventually the educational work-program in budget discussions will be considered primarily as to what it means and secondarily as to what it will cost. Even further, speaking generally, I believe that finally, thru this medium and its extension, educational elections and appointments will be discussed and decided on the basis of functional service rather than on the basis of party loyalty, the tariff or the question of preparedness. May that time soon arrive!

YEAR	MONTH	FUNCTION	Identical Subjects	Quantity	Unit of Measure	COMMODITY	Price	Amount	BOARD OF EDUCATION, ROCHESTER, N. Y.
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Form of Tabulating Card Used by Rochester Schools.

the possibility of expansion and contraction; and while I have given you this detail in full, I do not wish to give the impression that we ourselves at all times will compile such full and elaborate detail. The classification and codes are prepared for extreme expansion whenever the occasion requires. In current work, however, we shall condense as much as possible, and hew to the line of directness and simplicity. The essential point I wish to convey is that the fact that mechanical tabulation has such elasticity is what gives it such potentiality.

In closing, I desire to refer again to my orig-

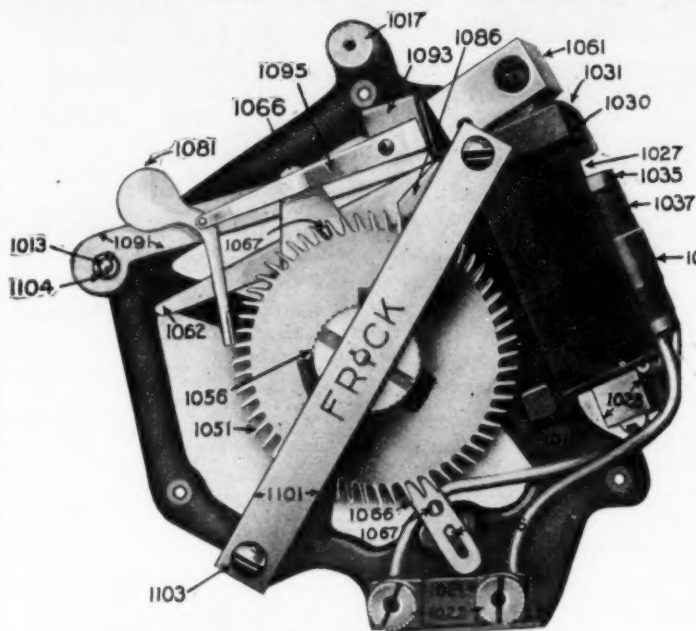
to be able to show the cost of any kind of instruction, whether it be academic, commercial, household or industrial, as well as the cost of the elements entering into the instruction. Thru this medium we are showing what it costs to administer the schools, to operate the schools, to repair the schools, and the investment in the schools. We are showing the executive cost, the supervisory cost, the teaching cost, the janitorial cost, the construction cost and the educational extension and social service costs. We are also showing the expenditures in salaries, supplies, equipment, land and buildings. We

A teacher in the Minneapolis schools has recently made a study of the finances of Minneapolis and has found that the value of school property in the city is \$8,500,000; while the outstanding bonds representing the indebtedness of the school district amount to 83.2 per cent of the value of the school property. The suggestion is made that the school property is depreciating and that, unless unusual care is taken, the total indebtedness of the schools will be equal or even exceed the value of the school property.

Amesbury, Mass. The town has appropriated \$125,000 for a new high school building and equipment. An appropriation of \$7,000 has been made for a fifteen-acre site for the building. The building is to be erected during the present summer and is to be ready for occupancy at the opening of the fall term in September.

Frick Electric Time and Program Clock Systems

The Secondary Clock Movement that CHALLENGES ALL COMPETITION



FRICK Secondary Clock Movement

Its Points of Merit

1. GRAVITY DRIVE, which is a constant driving force. NO SPRINGS IN THE ENTIRE CLOCK, therefore no variation in driving power. No springs to SET or BREAK.
2. Positive drive for hands. Clock can jump only one minute at each impulse from Master Regulator. A special patented verge construction positively prevents racing. Movement is locked before, during and after impulse. THE ONLY SECONDARY CLOCK MOVEMENT THAT IS POSITIVELY LOCKED DURING THE FORWARD MOVEMENT OF HANDS.
3. Knife edge pivot for armature, minimum friction.
4. Cam construction which makes magnet 100% efficient.
5. No adjustments. Once right, always right. Its efficiency not dependent upon the accuracy of some adjustment which is variable.
6. Special Automatic Cut-out switch making it possible to remove any secondary clock movement with dial from case without tools, or without interfering with any other clock on circuit.
7. Hands are set by knurled nut on movement. No danger of locked hands, due to bending in setting clock.
8. Each clock consumes but 1-10 watt second per minute.

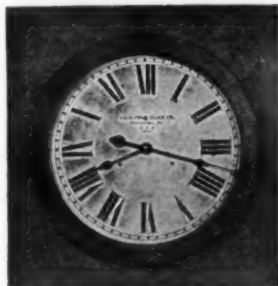
Compare the points of merit with those of our competitors.

LET US SHOW YOU, that the Frick Electric Time and Program Clock System is the best made. The four cardinal points of the compass which pilot our progress are:

SIMPLICITY, ACCURACY, SERVICE AND ECONOMY. Thousands of installations throughout the civilized world testify as to the merits of our goods.

Write for complete catalog. Yours for the asking.

N. B. We will gladly assist Architects, Engineers and School Authorities in the preparation of specifications, conduit lay-outs, etc. Send us your plans and let us prepare specification and conduit lay-out.



Style 1S



Style 2

Landis Engineering & Mfg. Co.
WAYNESBORO, PA., U. S. A.

FINANCING THE SMALL HIGH SCHOOLS.

(Concluded from Page 12)

limiting of their preparation so that each teacher is unable to teach except in a narrow sphere; all these tendencies lead to serious financial embarrassment unless on the administrative side definite actuary service is rendered the school so that the program is determined quite as much by economic standards, such as are demanded in all modern business, as by the prevailing spirit of financial disregard in high school education.

FUNCTIONS AND METHODS OF BOARDS OF EDUCATION.

(Concluded from Page 13)

"Everything to be done here is for one end, the education of the child. Everything you recommend we are going to ask you to justify in one way only—by showing that it is necessary to the running of a good school system. You are the expert whom we have put in charge of it, and we are going to see that you do your work and you are to keep us fully informed and at all times convinced that the work is being done as we wish it done—in as complete and effective manner as funds permit.

"If you recommend new things, you must convince us that they are necessary. You will be held strictly accountable for every expenditure. We shall watch the results which you get with the utmost care."

6. The superintendent shall plan a policy of development, and submit the same in great detail; the same to include a report on the school system as it is, with recommendations as to what it should be. The board should study the report with great care and decide either for or against the policy laid down.

This procedure should be repeated at frequent intervals.

7. Superintendent, as an expert in education, should convince the board, by frequent reports thereon, that the schools are continually progressing in two respects particularly—in the efficiency of teachers and in the character of the training given to the children. The superintendent's business is to secure this progress; the board's duty is to see that he secures it and to give him ample powers with which to produce it.

8. If the board makes its executive officers take full responsibility for the proper workings of the school system, one regular meeting a month of the board will be ample to transact all its business.

9. Adjourned and special meetings may be called when needed.

10. Special committees can be appointed to investigate and report in writing to the board on matters that require very special attention.

In conclusion let me say that I have discovered by observation and reading that Boards of Education are fearful of losing prestige, power and a certain dignity, if it is not noted, thru the public press, that they manage details and give orders to their educational experts whom they unfortunately look upon as mere subordinates.

This fear of the loss of publicity and prestige is a prime cause of the constant interference by boards in matters of which they are quite ignorant and concerning which they can do nothing that is helpful and much that is harmful.

THE ANNUAL SCHOOL BUDGET.

(Concluded on Page 15)

the board are referred to the superintendent. After carefully passing on their credentials he presents the names of those best fitted for their position to the board. In this way we are not

annoyed with our friends "log rolling" for this or that applicant, and the best results are possible. The teachers no longer call on us each spring to know whether or not they will be re-elected. Each teacher knows that if she is doing good work her place is secure; and if a teacher is incompetent, our superintendent soon discovers the fact, which is reported to the board without regard to any other consideration whatever.

Altho the budget is not necessarily back of all reforms, it is a fact that the budget is the outgrowth of the combined thought of the school board, the superintendent and teachers, and the spirit which moved them to plan has spread out into all departments and made itself felt. After the budget is carefully worked out, the superintendent is permitted to exercise his discretion so far as expenditures in the various lines are concerned, but is not allowed to exceed the budget without the action of the board. He knows just what amount he can spend in each department and knows how to plan his work systematically. When supplies are bought, his O. K. is necessary on each bill before it is presented to the finance committee for its signature.

By way of summary, it is fitting to state that our method of rigid economy and careful business management has enabled us during the past three years: (1) to purchase equipment and make improvements to the amount of \$11,062.26; (2) to raise the standard of the schools until they rank well in the state; (3) to care for the increased enrollment in the high school (378-461); (4) to offer manual training in the grades to 101 white boys and to 38 negro boys; (5) to offer domestic science to 112 white girls and 71 negro girls; (6) to increase the teaching force from 49 to 61 regular teachers and two supply teachers.

ANNOUNCEMENT



THE EAGLE PENCIL COMPANY

announces the removal of its offices and show rooms to their new building
703 East 13th St., New York

For convenience of the trade a show room has also been established
at the VICTORIA BUILDING, 27th St., Broadway and Fifth Ave.

PANAMA-PACIFIC EXPOSITION AWARDED

EBERHARD FABER

Grand Prize and Two Gold Medals for

Lead Pencils, Penholders, Erasers and Rubber Bands



The Splendid Lead in This Pencil
Makes for Economy and Efficiency

EBERHARD FABER, New York

No. 293
"Fine Writing"
Round,
Green Polish,
Grades
1, 2, 3, 4

Rightly Interpreted.

Dr. Wm. T. Harris, late United States Commissioner of Education, was a kindly soul who rarely refused a beggar. He was not, however, given to wasting sentiment upon worthless fellows as an incident which happened when he was located in St. Louis, proves.

Coming out of the Board of Education offices one day, when a heavy fog from the Mississippi lay over the city, a tramp accosted him:

"Say, Boss! Won't you help a poor fellow? I've seen better days."

"Well," said Dr. Harris, sizing up the man's drink besotted face, "I guess I have myself. It's a rotten day even for St. Louis."

One Answer.

In an examination covering hononyms a teacher, perhaps unwisely, asked for the spelling and definitions of the words celery and salary.

One pertinent answer read: You must have a salary to be able to buy celery.

That Also.

Latin Teacher—The ancients considered the liver the seat of affection. What is the seat now?

Observing Student—The knee.

Some School.

A state inspector of schools in one of the southern commonwealths says that he found one village building particularly neglected. The windows, which faced the road, were so covered with dust and dirt that none could look thru them. The local director when asked the reason said:

"Well, y' see, the teacher asked the board for curtains, becuz the scholars allas looked outa the windows to see who wuz goin' by. 'N so we told her to let 'em git dirty 'nuff so's the boys couldn't look thru them."



Not Always True.

Mother (grieved): My son, lazy men's lives are not recorded in history or literature for future generations.

Youth Who Failed: Well,—How about Rip Van Winkle!

Going One Better.

Crop stories quite frequently rival "fish stories" in their tendency to exceed the speed limit in crossing the boundary line of veracity, the bigness of pumpkins and the immensity of cabbages, apples or potatoes equaling any big fish ever described.

Now the capacity of soils, for raising things and "starting something" to grow, claims attention. Here is a story of fertile land told by Dr. Nathan C. Schaeffer, State Superintendent of Public Instruction for Pennsylvania, as a joke on himself.

The richness of soil was being discussed with a woman farmer from the Dakotas. Doctor Schaeffer glorified the crop possibilities of his native Lancaster County by saying: "Why, in our county the soil is so rich that if you stick a nail into the ground, the next morning it has grown into a crow-bar."

Whereupon the other replied: "Yes, I know, but in our country we use a tack for that purpose."

In the School Board Office.

New Clerk—I can't understand why my predecessor couldn't keep up with his work. This job is a cinch. I can finish all the daily work before noon.

Old Clerk—Well, you see, it takes time to get worked in.

Doctor Vowel.

Doctor Barton, warden of Merton College, Oxford, was the oddity of his time, says Tit-Bits.

As he was a man of remarkable sympathy, people told him everything that happened. A gentleman, coming one day into his room, told him that Doctor Vowel was dead.

"What!" said he. "Vowel dead? Thank heaven, it is 'e, and neither 'u' nor 'i'!"

Advancing.

"How is your boy getting along at the university?"

"Fine! He hammered his way on the baseball team, kicked his way on the football team, ran his way on the track team, sang his way on the glee club, picked his way on the mandolin club, and talked the chancellor into giving him another trial. That boy is certainly getting along fine!"

Naturally.

The class in hygiene was taking an examination.

"What would you do if the room was stuffy and hot?" was one of the questions.

"Go outside," wrote one of the students.

"All scientists are minus a sense of humor."

"Nonsense! Didn't they call this the temperate zone?"—Judge.

The Moral of the Story.

The kindergarten teacher recited to her pupils the story of the wolf and the lamb. As she completed it she said:

"Now, children, you see that the lamb would not have been eaten by the wolf if he had been good and sensible."

One little boy raised his hand.

"Well, John," asked the teacher, "what is it?"

"If the lamb had been good and sensible," said the little boy gravely, "we should have had him to eat, wouldn't we?"—New York Times.

Ma's Apprehension.

Mother to father after hearing her son rehearse the Greek alphabet—"Ezra, we can't let Silas go back to college again."

"Why not?"

"He has learned to swear. I just heard him say Alfred beat-er, damn-her, pelt-her."

Plain!

Principal Grammar (visiting)—Well, Doctor, what are you doing?

Superintendent—I am, er—um—preparing for the board of education a brief memorandum on the official annotations, of the state education department, of the explanatory circular concerning the school laws of 1841.

The Distinction.

"Pa," asked Willie, "what's the difference between an invalid and a sick person?"

"An invalid, my son," answered pa, "has money."

Repairing an Error.

Marion was saying her prayers. "And please, God," she petitioned, "make Boston the capital of Vermont."

"Why, Marion," said her shocked mother, "what made you say that?"

Marion settled herself in bed. "'Cause," she answered, "I made it that way in my 'zamination paper today an' I want it to be right."

Testing the Saw.

Mr. A—, who was planning to build an outdoor sleeping porch at the back of his house, had an expensive new saw sent home from a hardware store. He left his office early the next afternoon with the intention of doing the work himself; he donned a pair of overalls and went at it in good spirits. An hour or so later he came tramping angrily into the house, his face dark with exasperation, and flung himself down in disgust.

"That new saw I bought isn't worth five cents," he stormed. "Why, the thing wouldn't cut butter!"

His small son Tommy looked up in wide-eyed surprise.

"Oh, yes, it would, daddy," he said, earnestly; "why, Ted and I sawed a whole brick in two with it just this morning!"—Harper's Magazine.

Educational Trade Directory

The names given below are those of the leading and most reliable Manufacturers, Publishers and Dealers in the United States. None other can receive a place in this Directory. Everything required in or about a schoolhouse may be secured promptly and at the lowest market price by ordering from these Firms

- ADJUSTABLE WINDOW SHADES.**
Oliver C. Steele Mfg. Co.
L. O. Draper Shade Co.
Frampton Window Shade Co.
The Aeroshade Company.
Suprema Shading Works.
Caxton School Supply Co.
- AIR SCHOOL FURNITURE.**
Empire Seating Co.
- ART MATERIALS.**
Binney & Smith.
Eagle Pencil Co.
American Crayon Co.
Devoe & Raynolds.
- ATHLETIC FIELD APPARATUS.**
Fred Medart Mfg. Co.
W. S. Tothill.
- AUDITORIUM SEATING.**
Haney School Furniture Co.
Peabody School Furniture Co.
American Seating Co.
Peter & Volz Co.
Steel Furniture Co.
N. J. School & Church Furn. Co.
Heywood Bros. & Wakefield Co.
Empire Seating Co.
- BLACKBOARDS-COMPOSITION.**
N. Y. Silicate Book Slate Co.
American Seating Co.
Beaver Board Companies.
Caxton School Supply Co.
- BLACKBOARDS-NATURAL SLATE.**
Keenan Structural Slate Co.
Penna. Struct. Slate Co.
Natural Slate Blackboard Co.
- BOILERS.**
Kewanee Boiler Co.
- BOOK COVERS.**
Holden Patent Book Cover Co.
Peckham, Little & Co.
- BOOK PUBLISHERS.**
A. J. Barnes Pub. Co.
Ginn & Co.
D. C. Heath & Co.
Macmillan Co.
Isaac Pitman & Sons.
Silver, Burdett & Co.
Christopher Sower Co.
Rand McNally & Co.
Lyons & Carnahan.
American Book Co.
The Phonographic Institute.
A. Flanagan Co.
G. P. Putnam's Sons.
Gregg Publishing Co.
- BUILDERS' HARDWARE.**
Sargent & Co.
- CARD INDEX SUPPLIES.**
Globe-Wernicke Co.
- CHEMICALS.**
Central Scientific Co.
- CRAYONS.**
Binney & Smith.
National Crayon Co.
American Crayon Co.
E. W. A. Rowles.
Peckham, Little & Co.
Peter & Volz.
Associated Mfrs. Co.
A. Flanagan Co.
- DEAFENING QUILT.**
Samuel Cabot.
- DEODORIZERS.**
American Sanitary Products Co.
- DISINFECTANTS.**
American Sanitary Products Co.
Associated Mfrs. Co.
Theo. B. Robertson Products Co.
Central City Chemical Co.
- DOMESTIC SCIENCE EQUIPMENT.**
Grand Rapids School Equip. Co.
E. H. Sheldon & Co.
Kewanee Mfg. Co.
Economy Drawing Table Co.
C. Christiansen.
Leonard Peterson & Co.
- DOOR CHECKS.**
Norton Door Check Co.
- DRAFTING ROOM FURNITURE.**
Grand Rapids School Equip. Co.
E. H. Sheldon & Co.
Economy Drawing Table Co.
C. Christiansen.
- DRAWING MATERIAL.**
A. Flanagan Co.
- DRINKING FOUNTAINS.**
L. Wolff Mfg. Co.
Jas. B. Clow & Sons.
N. O. Nelson Mfg. Co.
Rundle-Spence Mfg. Co.
Glauber Brass Mfg. Co.
D. A. Ebinger San. Mfg. Co.
Ingberg Sanitary Supply Co.
- ERASERS.**
Peter & Volz.
Caxton School Supply Co.
- ERASER CLEANERS.**
American Seating Co.
Wisconsin Electric Co.
- FILING CABINETS.**
Globe-Wernicke Co.
- FIRE ALARM SYSTEMS.**
Holtzer-Cabot Electric Co.
Stand. Electric Time Co.
- FIRE ESCAPES.**
Dow Wire & Iron Works.
Minnesota Manufacturers Assn.
- FIRE EXIT DEVICES.**
Vonnegut Hardware Co.
Sargent & Co.
- FIRE EXIT LATCHES.**
Vonnegut Hdw. Co.
- FIRE EXTINGUISHERS.**
Samuel Lewis.
- FIRE PROOF DOORS.**
Dahlstrom Metallic Door Co.
- FLAGS.**
The Chicago Flag & Decorat. Co.
Annin & Co.
- FLOOR BRUSHES.**
Milwaukee Dustless Brush Co.
- FLOOR DEAFENING.**
Samuel Cabot.
- FORGES.**
Oliver Machinery Co.
Grand Rapids School Equip. Co.
- FUMIGATORS.**
Associated Mfrs. Co.
Central City Chemical Co.
- FURNITURE.**
American Seating Co.
Peabody School Furniture Co.
Haney School Furniture Co.
Peter & Volz Co.
Steel Furniture Co.
N. J. School & Church Furn. Co.
Heywood Bros. & Wakefield Co.
Columbia School Supply Co.
Empire Seating Co.
Superior Seating Co.
Educational Equipment Co.
Langslow, Fowler Co.
- GAS MACHINES.**
Detroit Heat & Light Co.
Tirrill Gas Machine Co.
- GENERAL SCHOOL SUPPLIES.**
American Seating Co.
E. W. A. Rowles.
Peckham, Little & Co.
Columbia School Supply Co.
A. Flanagan Co.
Whitaker & Ray-Wiggin Co.
- GLOBES.**
Rand, McNally & Co.
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- GYMNASIUM APPARATUS.**
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Amer. Foundry & Furnace Co.
- INK-DRY.**
E. W. A. Rowles.
Bayless Sons Co.
A. Flanagan Co.
- INK WELLS.**
U. S. Inkwell Co.
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REFERENCE INDEX

- | Page | Page |
|--|--|
| Aeroshade Co., The.....28 | Keenan Struct. Slate Co.....1 |
| American Book Co.....75 | Kewanee Mfg. Co.....40 |
| American Crayon Co.....73 | Keystone Varnish Co.....40 |
| American Foundry & Furnace Co.....52 | Landis Eng. & Mfg. Co.....43 |
| American Portable House Co.....82 | Lewis, Samuel.....26 |
| American Sanitary Products Co.....76 | Lyons & Carnahan.....74 |
| American Seating Co.....59 | Macmillan Company, The.....16 |
| American Woodworking Mach. Co.....73 | McConnell School Supply Co.....70 |
| Annin & Company.....2 | McIntosh Stereopticon Co.....34 |
| Armstrong Co., The.....82 | Medart Mfg. Co., Fred.....78 |
| Associated Mfrs. Co.....4 | Mershon & Morley Co.....78 |
| Austral Window Co., 4th Cover.....1 | Miller Vehicle Heater Co.....4 |
| Barnes Pub. Company, A. J.....35 | Milwaukee Dustless Brush Co.....37 |
| Bausch & Lomb Opt. Co.....35 | Minnesota Mfrs. Ass'n.....46 |
| Bayless Sons Co.....70 | National Crayon Co.....4 |
| Beaver Board Co., The.....62 | Natural Slate Blackboard Co., 2d Cover.....4 |
| Bemis, A. L.....62 | Nelson Mfg. Company, N. O.....63 |
| Berger Mfg. Company.....8 | N. J. School & Church Furn. Co.....63 |
| Binney & Smith Co.....72 | N. Y. Silicate Book Slate Co.....8 |
| Bossert & Sons, Louis.....83 | Norton Door Check Co.....65 |
| Cabot, Samuel.....4th Cover.....3 | Oliver Machinery Co.....67 |
| Caxton School Supply Co.....3 | Olsen & Sons, C. J.....4 |
| Central City Chem. Company.....74 | Patek Brothers.....64 |
| Central Scientific Co.....74 | Peabody School Furniture Co.....64 |
| Chicago Flag & Decorating Co.....64 | Peckham, Little & Co.....70 |
| Christiansen, C.....49 | Penna. Structural Slate Co.....70 |
| Clow & Sons, Jas. B.....49 | Peter & Volz Co.....53 |
| Columbia School Supply Co.....58 | Leonard Peterson & Co.....48 |
| Cook & Co., F. H.....76 | Phonographic Institute, The.....8 |
| Cott-a-Lap Co.....56 | Pitman & Sons, Isaac.....74 |
| Crescent Machine Co.....38 | Power Co., Nicholas.....77 |
| Dahlstrom Metallic Door Co.....38 | Putnam's Sons, G. P.....74 |
| Delphi Wagon Works.....70 | Rand McNally & Co.....76 |
| Detroit Heating & Lighting Co.....44 | Remington Typewriter Co.....54 |
| Devoe & Raynolds.....72 | Robertson Products Co., Theo. B.....54 |
| Dow Wire & Iron Works.....1 | Rowles, E. W. A.....70 & 80 |
| Draper Shade Co., L. O.....58 | Rundle-Spence Mfg. Co.....50 |
| Durand Steel Locker Co.....45 | Sargent & Co.....9 |
| Eagle Pencil Co.....84 | Sengbusch Self-Closing Inkstand Co.....48 |
| Eblinger Sanitary Mfg. Co., D. A.....57 | Sheldon & Co., E. H.....62 |
| Economy Drawing Table Co.....66 | Sherwin-Williams Co., The.....3 |
| Educational Equipment Co.....9 | Silver, Burdett & Co.....10 |
| Empire Seating Co.....61 | Sonneborn Sons, L.....65 |
| Faber, Eberhard.....84 | Sower Co., Christopher.....76 |
| Federal Sign System (Electric).....78 | Superior Seating Co.....63 |
| Federal Steel Fixture Co.....9 | Squires Inkwell Co.....2 |
| Flanagan Co., A.....47 | Standard Electric Co., 4th Cover.....63 |
| Folding Partition Co.....50 | Steel Furniture Co.....63 |
| Frampton Window Shade Co.....50 | Steele Mfg. Co., Oliver C.....80 |
| Ginn & Company.....10 | Stone Products Co.....48 |
| Glauber Brass Mfg. Co.....55 | Tannewitz Works, The.....5 |
| Globe-Wernicke Co.....39 | Tothill, W. S.....5 |
| Grand Rapids Schl. Equip. Co. 42 & 43.....43 | Tirrill Gas Machine Lighting Co.....68 |
| Gregg Pub. Company.....75 | United Electric Co., The.....79 |
| Haney School Furn. Co.....68 | U. S. Inkwell Co.....48 |
| Hart & Hutchinson.....71 | Victor Talking Machine Co.....33 |
| Heath & Co., D. C.....10 | Virginia School Supply Co.....53 |
| Hess Warming & Ventilating Co.....44 | Vonnegut Hdw. Co.....5 |
| Heywood Bros. & Wakefield Co.....60 | Wayne Works, The.....5 |
| Hill-Standard Mfg. Co.....4 | Whitaker & Ray-Wiggin Co.....9 |
| Holden Patent Book Cover Co.....34 | Whitcomb & Boyce.....78 & 80 |
| Holtzer-Cabot Elect. Co., The.....54 | Williams, Inc., John.....70 |
| Hoyt Co., Arthur S.....70 | Wilson, Inc., Jas. G.....7 |
| Ingberg Sanitary Supply Co.....68 | Wimmer & Co., C. I.....80 |
| Johnson, R. R.....63 | Wisconsin Electric Co.....41 |
| Johnson Service Co.....63 | Wolff Mfg. Co., L.....51 |

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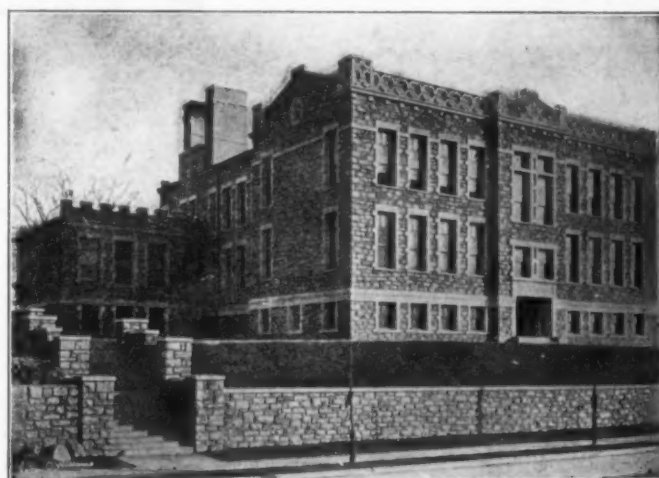
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